

# SOUTHERN AUTOMOTIVE JOURNAL

SERVING THE 19 SOUTHERN AND SOUTHWESTERN STATES SINCE 1921

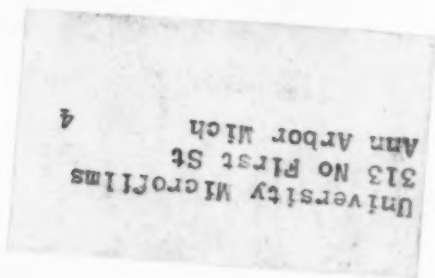
*April 1961*

ANNUAL SAFETY ISSUE

## We Can Promote Safety



Eye doctors like for you to leave off the goggles.  
Welding hose on floor encourages broken legs, too.



"When wheels are out of balance it means wear and tear on the steering mechanism. Tire wear occurs and parts are worn unevenly," says this service manager who has in mind the safety of this prospective customer.



# WIN

one of 94  
**FREE TRIPS**

*Indianapolis*  
**"500"**

**\$50,000.00 PERFECT  
CIRCLE CONTEST**

**SPECIAL GRAND PRIZES**



**TWO 1961 THUNDERBIRDS**  
*Twins of the 1961 Pace Car*

It's easy and fun to enter...just predict the qualification speed of the pole position winner in the 1961 Speedway time trials!

Plan now to live it up like a king this year at the Indianapolis Speedway Classic! You'll get the full red carpet treatment with a first class round trip by air. Four enjoyable days . . . hotel accommodations and meals—a special tour—and \$50.00 pocket money. If you are a winner you may bring any male employee of your Perfect Circle supplier as a guest. And all winners and guests who make the trip automatically qualify for the grand prize Thunderbird drawings. All you need do is estimate the winning pole position speed in the qualifying time trials and send it in with a PC box part number tab.

You compete only with entrants in your area and you may enter many times. Contest ends April 30, 1961 so enter early—enter often. Complete contest rules are on the official entry form—get one at your PC supplier and test your skill today!

**HURRY!  
HURRY!**



**Contest ends April 30!**

**PERFECT CIRCLE**  
**PISTON RINGS • POWER SERVICE PRODUCTS**

Hagerstown, Indiana





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First promotion for 1961:  
Buy 10 cans of Car Care  
Products — get two free.  
Order today.



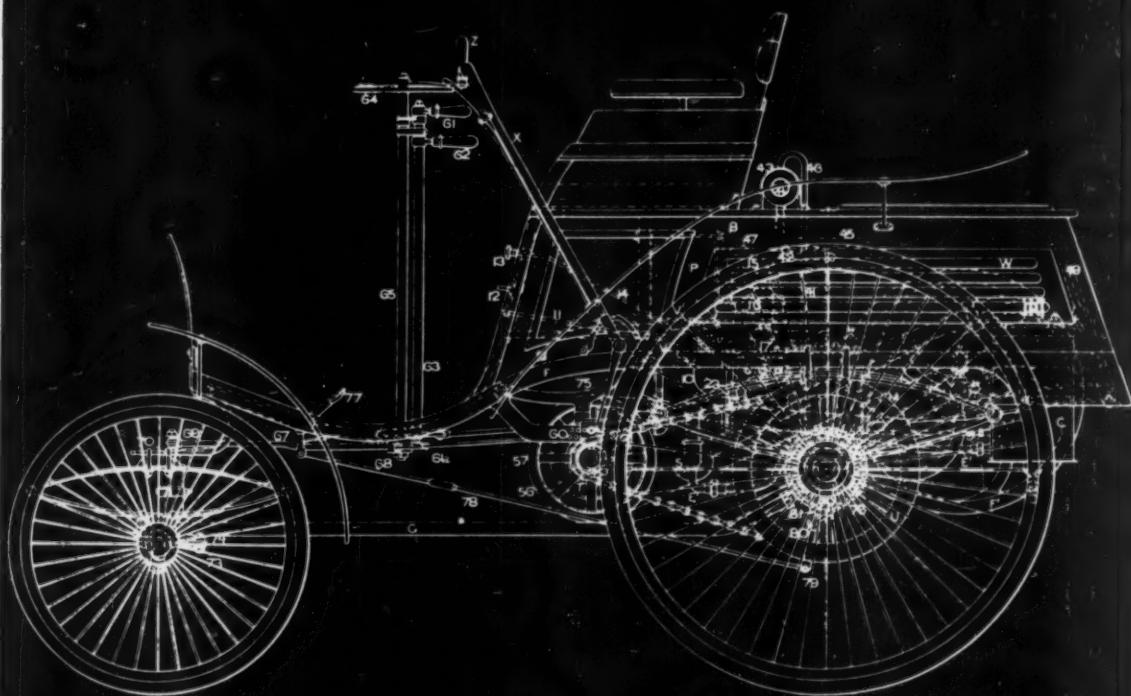
...MADE FOR THE PROFESSIONAL!

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one of the very few cars\* you can't tune up with a Hygrade Jiffy Kit



\*Sorry, no Jiffy Kit available for this 1898 Benz "Ideal" Two-Seat Motor Carriage.



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See your jobber or write HYGRADE PRODUCTS DIVISION, Standard Motor Products, Inc., Long Island City 1, New York.

**HYGRADE JIFFY KITS**

*for carburetor tune up*



*a kit for almost every car*

# SOUTHERN AUTOMOTIVE JOURNAL

Covering Automotive Sales and Service

Volume 41

No. 4

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Published monthly by

W. R. C. SMITH PUBLISHING COMPANY

Editorial and Business Offices

1760 Peachtree Road, N.W., Atlanta 9, Ga.

Publishers also of

ELECTRICAL SOUTH	TEXTILE INDUSTRIES	SOUTHERN HARDWARE
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Phone 874-4462

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SOUTHERN AUTOMOTIVE JOURNAL is published monthly at 1760 Peachtree Road, N.W., Atlanta 9, Ga., by W. R. C. Smith Publishing Co. Executive and Editorial Offices: 1760 Peachtree Road, N.W., Atlanta 9, Ga. Second-class postage paid at Atlanta, Ga., and at additional mailing offices. Subscription Rates: United States and Possessions, \$1.50 per year; Canada and Foreign Countries, \$10.00 per year. Postmaster: Send notices by Form 3579 to 1760 Peachtree Road, N.W., Atlanta 9, Ga.

SOUTHERN AUTOMOTIVE JOURNAL for April 1961

Serving the 19 Southern and  
Southwestern States Since 1921

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NEED A *New Britain* TOOL?  
CALL YOUR NAPA JOBBER!

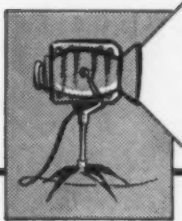


These famous Tools really put you in business and make certain you'll make money in today's automotive service and repairs. Ask your Jobber to show you the many new, time-saving Tools in this great Line that are actually designed around your job! Remember, the cost of Tools you use in your work is deductible from your income tax.

THE NEW BRITAIN MACHINE COMPANY  
NEW BRITAIN • CONN.

*New Britain*  
**HAND TOOLS**





## Automotive **SPOTLIGHT**

April 1961

You're not doing much about Safety—unless the customer orders it. Nevertheless, you can still say you're by far among the majority of automotive men in this respect. But just in case you feel a desire to promote safety selling in your shop, SAJ presents this month its annual safety issue, dovetailing with organizations which are promoting the national safety-checking of motor vehicles next month in states without inspection laws.

Here's the importance of what you're reading: 1970 will see 100,000,000 motor vehicles on the road and about 120,000,000 drivers will put more than a trillion miles on their odometers each year, according to Paul Jones, director of the National Safety Council's information bureau. "And unless we do better in the next ten years," said that authority, "there will be a traffic toll in 1970 of 55,000 deaths and 2,000,000 disabling injuries."

Look at the inglorious picture in the South: In the 1949-58 period 130,491 persons were killed in motor vehicle accidents, an average of 35 a day. That loss of life was the equivalent of wiping out the metropolitan population of Asheville, N.C., Galveston, Texas, or Lexington, Ky. In the nation as a whole, 368,190 persons died from that cause in those ten years, equivalent to eliminating the population of Wyoming. The authority for the figures is the Vital Statistics Division of the U.S. Department of Health, Education and Welfare.

Safety belts are coming back. They'll come back faster, too, with a little nudging on your part. Not one of the 442 victims of last July 4th's highway massacre wore a seat belt, the National Safety Council ascertained. On page 43 is a report on the belt outlook. Who's to say when a belt wouldn't save a life; and when a car is truly smashed, how can one tell if some faulty condition was the cause? Only the conscientious shop man can urge customers to keep their vehicles in safe condition, as only trained automotive men can know that much about these increasingly complicated four-wheel chariots.

Missouri killed a compulsory seat belt proposal. Although the state highway patrol and other state safety agencies recommended its passage, a bill to forbid the registration of new cars unless equipped with belts was vetoed by a committee.

'65 is going to be a big year for Texas. Decks are being cleared to house the gigantic International Automotive Service Industries Show in Dallas that year. Last month the state affiliate of the Independent Garage Owners of America voted to invite the IGOA convention to the Lone Star State in '65. It would be the first time for the show to come South; the national garagemen's convention, scheduled this year in June at St. Paul, Minn., was held last year at Atlanta, attracting garage owners from over the nation.

Signpost to the debuts of the '62 models: The spring upturn in car sales was adding some steam as April rolled into view, but the ever-alert car factories were reported playing it safe. If the expected lift is insufficient, then some '62 models will be appearing possibly by August or at least early September. Topflight brass are holding an economic-weather finger in the wind to test the way sales are blowing and will be ready to open presentations earlier to dealers, if found desirable.



## *Sealed Power Stainless Steel Oil Ring*

### *THIS OIL RING PROTECTS YOUR SHOP'S REPUTATION*

Since its introduction in 1957 engines, Sealed Power's Stainless Steel oil ring has won engine builder acceptance faster than any by far.

New car engineers, tests, and millions of miles of actual on-the-road operation, proved this ring out for you. No ring yet controls oil as well. Take Sealed Power's

Stainless Steel oil ring—your ability to turn out a good overhaul—and you have an unbeatable combination.

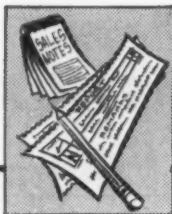
The Stainless Steel oil ring side-seals, holds its fit, retains its tension, resists sludging and corroding, is easy to install. Sealed Power Corporation, Muskegon, Michigan.



## **Sealed Power**

Stainless Steel piston rings stop oil pumping

PISTONS • PINS • SLEEVES AND SLEEVE ASSEMBLIES • VALVES • WATER PUMPS • TAPPETS



## Automotive MARKETS

### "Sharp Upturn" Ahead, Ford Executive Says

TWO PRIME indicators point to "a sharp upturn in the automotive industry" by late April, an executive of Ford Motor Co. told SOUTHERN AUTOMOTIVE JOURNAL in a press conference at Atlanta last month.

L. A. Iacocca, vice president of Ford and general manager of the Ford Division, based this prediction on the "steady rise" in wholesale values of used Fords and Chevrolets in the one- to six-year-old bracket and the higher sales of new Ford trucks.

There has been a rise of 11 to 12% in these used-car values in the six ten-day periods since the bottom was reached December 10, he said. Meanwhile, Ford's truck sales climbed to more than 1,000 a day last month—more than eight per cent above January (66,300 versus 62,800 for the whole industry).

Importantly, the youthful executive pointed out, a big percentage of the trucks were of the smaller type used by service industries, indicating a rise in those fields.

"Businessmen could be withholding their truck buying, but I think they are not reading things as badly four or six months from now," he observed. New-car sales also moved up last month, it was pointed out.

"The upturn in new-car sales and firming of the used-car market are important indices that have historically signaled the reversal of a trend," Iacocca declared.

"We can expect to see more spendable income in the hands of consumers and the start of a chain reaction leading to new highs in a prosperous, progressive economy."

He predicted a "booming" fourth quarter this year due to the advent of the '62 models. Domestic-car sales will run a little lower this year than his earlier predictions, he said, at around 5,800,000, plus fewer foreign-car sales, at around 400,000, for a total of 6,200,000. The slight decline from '60 sales of new cars can be blamed on the poorer sales record earlier this year, he added.



### Richmond Service Stations Form Buying Co-Op

A GROUP of 25 Richmond, Va., area service stations have formed a co-operative for wholesale buying at prices competitive with discount houses and automotive parts wholesalers.

Several manufacturers, including some long-established and well-known in the service market, have already arranged to supply the group, either directly or through a jobber acting as a warehouse. The Virginia Automotive Service Co-Operative's warehouse is at 1734

Kelly Road, near Parker Field.

Howard W. Scott, president, said the group was formed so "we can buy at a better price to sell at a better price." Its members have found it "almost impossible to compete in certain products," he added.

Plans called for buying a selected list of 12 items initially direct from manufacturers rather than through major oil companies or jobbers. Expansion of both this list and the membership is anticipated, Scott said.

Initial items include air and oil filters, polishes and additives, brake and transmission fluids and some

automotive "hard" parts.

"We're putting priority on fast-turnover items," said Scott.

William Cox, formerly with a manufacturer, is executive secretary.

Participating membership requires purchase of at least five shares at \$100 each. Besides Scott, other officers include C. W. Shewbridge, Jr., vice president; C. L. Todd, III, secretary, and Webb Carroll, treasurer.

### Air-Conditioner Sales Rack Up Biggest Year

FOURTEEN independent manufacturers of automotive air conditioners racked up in 1960 their biggest sales year to date with units installed by the manufacturers' distributor-dealer organizations totaling 201,145 units compared with 157,627 in 1959.

D. A. Brown, executive director of the Automotive Air Conditioning Association headquartered in Dallas, Texas, indicated the increase represents a 27% gain in sales over 1959. In the compact-car market, Brown indicated that after models produced by the "Big Three" hit the market in the fall of 1959, the independent producers of air conditioners accounted for sales of 14,819 in 1960, or 7.4% of the total 201,145.

In 1957 the number of "hang-on" units installed totaled 142,330; in 1958, 142,656.

### Food Machinery Buys Barrett Equipment

PURCHASE of the Barrett Equipment Co., St. Louis, by Food Machinery and Chemical Corp. has been announced by Harry S. Barrett, owner and president of the former company, and Tracy Carignan, manager of FMC's John Bean eastern division.

Barrett will become an operating component of the John Bean eastern division, with no immediate changes anticipated in its method of operation.

Purchase price was not disclosed by the officials.

GOJER, INC. Announces Its

## "STOP WASTE PROGRAM"

**CARELESS WASH-UP PROCEDURES ARE COSTING YOU MONEY!**

A pair of dirty hands with free access to an open can of soap may well be the reason your company handcleaning bill is such a costly item. Provide an effective way of controlling the amount of soap being wasted by your employees, and you'll prevent the greatest part of your handcleaning dollar from being washed down the drain.



**GO-JO'S HEAVY DUTY DISPENSER CONTROLS WASH-UPS... SAVES YOU MONEY!**

Designed to eliminate waste, the Go-Jo Heavy Duty Dispenser delivers just the right amount of Go-Jo to get even the grimmest hands spotlessly clean. Go-Jo Creme Hand Cleaner is a concentrated formula containing GT-7 for dermatitis protection, plus soothing emollients to prevent chapping. When used in the Heavy Duty Dispenser, it provides four times as many clean-ups as "hand scoop" methods.

Pat. No. RE. 24312



The Go-Jo jobber serving your area will be happy to show you how to cut as much as 75% off your handcleaning expenditures. Write us today.

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MANUFACTURERS OF *go-jo* PRODUCTS

## Next Month's Editorial Menu

### **Sell the Customer His Unseen Needs**

**Why do some shops seem to be busy all the time, performing profitable repairs—and keeping the customers happy, too?**

**Maybe it's due to policies of watching out for jobs which the car owners won't request unless a decided clank-clank is heard.**

**One way to keep the shop ahead in black dollars is to be alert for the extra—but needed—work to be found.**

**How several Southern shops are doing just this will be detailed for you next month, including such items as brakes, shocks and front-end.**

**As has been true since the March issue, there'll be another "blueprint" article on a time-tested garage building. Reader interest in this material has been higher by far than ever before.**

### **TECHNICAL-WISE**

**If shop volume doesn't pick up now, you can't blame dreary winter weather! To help the line get on the ball, Ed Lowery next month will cover the high spots on water pumps, so essential to a properly functioning cooling system.**

**"Aligning bodies" will treat with this highly profitable activity, pointing out some short cuts toward getting the jobs done efficiently and yet with more profit.**

**Another body story will give the correct procedure in servicing windshields of the more popular compacts.**





# Automotive NEWS BRIEFS

## COTTON AND ROSEMARY RIPPEY

present  
THE NEW AND HOWLING SUCCESS  
"The Heir to the Rippey Millions"

Starring  
JAMES MILAS RIPPEY, JR.

FIRST SHOWING MARCH 17, 1961, 9:32 P.M.  
Directed by DR. LYLES  
Designer COTTON  
Reproduced by ROSEMARY

The management reserves the right to cancel  
personal appearance if Star is asleep.

New Wide-Screen and in  
Thrilling Blond Technicolor  
WEIGHT AND EYES  
6 10 2  
LBS. OZS. BLU  
DR. STORK THEATRE  
Bedside Seat  
MAURY COUNTY HOSPITAL  
Columbia, Tennessee

No ordinary birth announcement was acceptable to a certain official of Auto Parts Co., Columbia, Tenn., when his family was expanded last month. Proof of the statement appears here!

JANUARY	APRIL	AUGUST	DECEMBER
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

## Looking Ahead

### DEALERS

- April 12-13—Annual convention of Kansas Motor Car Dealers Association, Hotel Lassen, Wichita.
- April 23-25—Annual convention of Automotive Trade Association of Virginia, John Marshall Hotel, Richmond.
- April 30-May 3—Annual convention of North Carolina Automobile Dealers Association, Carolina Hotel, Pinehurst.
- April 30-May 2—Annual convention of Tennessee Automotive Association, Andrew Jackson Hotel, Nashville.
- May 7-9—Annual convention of Texas Automotive Dealers Association, Gunter Hotel, San Antonio.
- May 11—Annual convention of Missouri Automobile Dealers Association, St. Louis.
- May 14-16—Annual convention of Georgia Automobile Dealers Association, General Oglethorpe Hotel, near Savannah.
- May 14-16—Annual convention of Kentucky Automobile Dealers Association, Sheraton Hotel, Louisville.
- June 2-3—Annual convention of New Mexico Automotive Dealers Association, La Fonda Hotel, Santa Fe.
- Oct. 29-31—Annual convention of Florida Automobile Dealers Association, Galt Ocean Mile Hotel, Fort Lauderdale.
- Nov. 12-14—Annual convention of Mississippi Automobile Dealers Association,

tion, Buena Vista Hotel, Biloxi.  
Feb. 3-7—Annual convention of National Automobile Dealers Association, New York City.

### GARAGEMEN

- June 28-July 1—Annual convention of Independent Garage Owners of America, Lowry Hotel, St. Paul, Minn.
- Sept. 15-17—Annual convention of Independent Garage Owners of Georgia, Ida Cason Callaway Gardens, near LaGrange.

### WHOLESALE

- April 19—Meeting to finalize the creation of the Automotive Wholesalers of Mississippi, Heidelberg Hotel, Jackson.
- April 30-May 2—Annual convention of Automotive Wholesalers Association of Tennessee, Hotel Claridge, Memphis.
- May 14-17—Annual convention of Automotive Engine Rebuilders Association, Fontainebleau Hotel, Miami Beach.
- June 4-6—Annual convention and booth conference of North Carolina Automotive Wholesalers Association, Grove Park Inn, Asheville.
- June 25-27—Annual convention of Automotive Wholesalers Association of Alabama, 400 Motel, Pensacola Beach, Fla.
- Aug. 13-15—Annual convention of Kentucky Automotive Wholesalers Association, Lexington.
- Oct. 11-14—Annual convention and booth conference of Automotive Wholesalers of Texas, San Antonio.
- Oct. 27-29—Fall convention of Virginia-Carolinas Automotive Wholesalers Association (for members only),

- The Greenbrier, White Sulphur Springs, W.Va.
- Oct. 29-31—Annual convention of Virginia Automotive Wholesalers Association, Hotel Roanoke, Roanoke.
- Nov. 14-15—Annual convention of South Carolina Automotive Wholesalers Association, Fort Sumter Hotel, Charleston.
- Nov. 15-17—Annual convention of Florida Automotive Wholesalers Association, Americana Hotel, Miami Beach.
- Feb. 28-March 3—International Automotive Service Industries Show, Chicago.
- Feb. 13-16, 1963—International Automotive Service Industries Show, Philadelphia.

### GENERAL

- July 31-Aug. 2—National Auto Accessory and Parts Exhibit, Las Vegas.
- Oct. 30-Nov. 2—Annual convention of Automotive Warehouse Distributors Association, Muehlebach Hotel, Kansas City, Mo.
- Nov. 8-10—Annual convention and trade show of Automotive Parts Rebuilders Association, Biltmore Hotel, Los Angeles.

The Comet S-22, introduced earlier this month by Lincoln-Mercury Division, features individually contoured "bucket-type" front seats separated by a console storage compartment. Available only in a two-door model, the luxury compact's sports-type theme is carried out in a totally new interior from carpeting to upholstery. The foam-padded rear seat is styled to blend with the front seats by using upholstery pleats to simulate the "bucket" theme.



# IMPORTANT ANNOUNCEMENT

## To All Owners of Tire Changers — Regardless of Brand. Coats Perfects New Roller-Action Mount-Demount Tool — THE COMBINATION '61'

Developed by Coats engineers in cooperation with a leading tire manufacturer, this new Combination Tool '61' is the *only* tire-changing tool that *rolls* them off and on. With its 3 exclusive rollers, there is nothing to compare with it. Because of several patents pending, there may *never* be.

Coats has also perfected a unique "iron finger" to *automatically* lift the bead away from the rim as it is rolled off. You no longer need to hold up the tire while removing it. Photos show how this amazing new tool works.

ONLY  
\$18<sup>00</sup>

**DESIGNED AND ENGINEERED FOR ALL TIRE CHANGERS  
REGARDLESS OF MAKE OR MODEL. A MUST FOR THE  
NEW BUTYL AND/OR THE NEW 2-PLY TIRES.**

## THE BEST IN AIR POWER

No one has yet come up with a satisfactory substitute for any of the three air-powered tire changers shown here. Each continues to prove its superiority over all others in its price bracket.

The reason we have been able to maintain our leadership in the tire equipment field is because we put the satisfaction of our customers above everything else. You don't take chances when you buy Coats equipment. Your satisfaction is *guaranteed*.



Bead Roller

Take-Off Roller

Iron Trailing Finger

Put-On Roller

Put-On Guide

Write for free literature. Dept. 901



COATS  
BELL-AIR  
Only  
\$109.50



THE  
CHALLENGER  
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TWIN-AIR  
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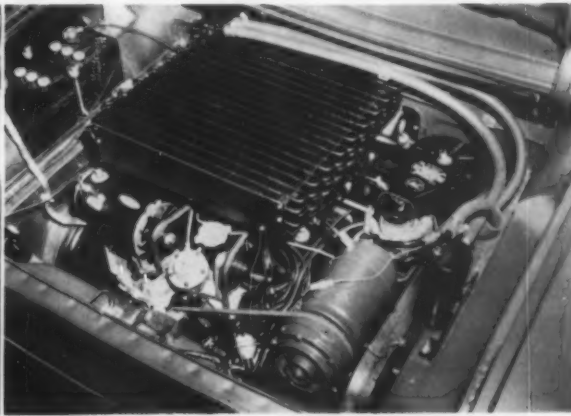
HOME OFFICE: 12 Depot Square, Englewood, New Jersey  
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WEST COAST: 3453 Cahuenga Blvd., Los Angeles 28



ONCE YOU HAVE TRIED COATS, YOU WILL BE SATISFIED WITH NO OTHER



Designed for the specific requirements of the Corvair, Chevrolet's de luxe air conditioner shown at left is mounted high to maintain foot room for passengers. It features three adjustable cold air outlets for individual comfort and is said to be the first factory-installed air conditioner for rear-



engine cars. Unit also is available as an accessory for dealer installation. Condenser (right photo) is mounted flat above engine fan in rear compartment, along with compressor, which is driven by separate belt and pulley. Dipstick and oil filler cap are accessible for normal servicing.

## Auto-Crat Mfg. Delivers 3,000,000th Safety Belt

SHIPMENT of its 3,000,000th safety belt has been made by Auto-Crat Mfg. Co., according to President William Noe.

Many of the belts have been furnished to Ford Motor Co. for sale under the Fo-Mo-Co brand name, under an agreement that dates back to 1955, Noe said. In addition to its standard belt, the company manufactures the Bodi-Gard safety belt with metal-to-metal buckle design, the Interceptor safety harness—primarily designed for emergency vehicle use—and the Babi-Gard, a safety harness for the protection of infants and children.

## Ford Louisville Program Tests New-Unit Pool

FORD Division inaugurated at Louisville, Ky., a few weeks ago a test pool of new trucks in order to give dealers better delivery service and save dealers some costs otherwise involved in carrying this inventory.

That's what L. A. Iacocca, vice president of Ford Motor Co. and general manager of Ford Division, revealed to SOUTHERN AUTOMOTIVE JOURNAL in an interview at Atlanta last month.

"Whatever we learn from this, I

do not hold high hopes" for doing the same thing with new cars, he said.

At least there will be "some intelligent planning" aimed at helping dealers to minimize their floor-plan costs, he added. "We can't do anything about such fixed costs as social security taxes, but at least we can save the public and dealers millions of dollars" resulting when an unusually heavy inventory of new cars is in dealers' hands, as was true earlier this year when an estimated 1,000,000 units were unsold.

This inventory, calculated as a 60-day supply for a "normal" sales year, "isn't right," Iacocca said, but he was unable to estimate what figure below that would be "right."

## Knoxville Keeps "Dry," Dealers Shy Away

WHEN Knoxville kept "dry" the other day, those voters caused a change in plans for the annual convention of the Tennessee Automotive Association.

This group of franchised car dealers, whose meetings always draw several hundred persons, won't meet there, as previously scheduled, but will convene instead at the Andrew Jackson Hotel in "wet" Nashville. The dates—April 30-May 2—remain unaltered.

You just can't have convention cocktail parties very relaxingly in a

city which has voted "dry." And how many conventions—especially automotive—have you ever heard of where there weren't cocktail parties?

## Studebaker Acquires Chemical Compounds

STUDEBAKER-PACKARD Corp. has acquired Chemical Compounds, Inc., of St. Joseph, Mo., processor and distributor of motor oil and fuel additives, according to a joint announcement by Sherwood H. Egbert, Studebaker president, and C. Dwight Liggett, president of Chemical Compounds.

The sixth acquisition by Studebaker under its diversification program, Chemical Compounds will be operated as a division. It was founded four years ago by its present officers—Liggett, Robert P. DeHart, vice president, and James C. Hill, secretary and treasurer. Liggett and DeHart will continue in their present capacities and Hill will be retained by the company as a consultant.

## Charleston Elects James

F. B. "Bernie" James of McKethan Oldsmobile is the new president of the Charleston (S. C.) Auto Dealers Association. Walter J. Miller of Miller-Cadillac is vice president and Matt Moye of American Discount Co. is secretary.

# BACKSTOP YOUR RING JOBS

What you really sell is customer satisfaction—make sure of it. Here's the secret...

When the break-in period is over, make sure your ring jobs keep on giving customers the improved performance and the gas and oil savings they expect. Recommend the motor oil that cleans as it lubricates, to prevent sticking rings and noisy lifters. Customers appreciate it. And you'll appreciate more repeat business and bigger profits!

The oil that protects your good work best is Pennzoil—the world's richest, most complete motor oil. So rich, it gives double the protection demanded! So complete, users never need extra additives! Because the special power ingredient, Z-7, keeps parts *clean*—stays on the job for the full life of each oil change.

Pennzoil Z-7 makes customers happy . . . builds more business . . . boosts your profit. So protect *all* your engine jobs with Pennzoil. Call your Pennzoil distributor, listed in the Yellow Pages, or write Pennzoil, Oil City 33, Pa.



## 2 Great Motor Oils!

This great pair of 100% pure Pennsylvania Motor Oils with Z-7 stays tough full time—keeps moving parts clean and free of excessive wear. Use them—recommend them, for top customer satisfaction.

Famous Pennzoil with Z-7  
in all correct service grades.  
Pennzoil 10W-30 with Z-7,  
world's only oil-rich,  
multiple-viscosity oil.



Member Penn. Grade Crude Oil Assn.,  
Permit No. 2, Oil City, Pa.



## Electrical Trouble Tops Car-Breakdown Causes

**N**UMBER one headache of the American motorist last year was battery or electrical trouble, the American Automobile Association reported in its annual study of car service calls.

It was the fourth consecutive year that these particular mechanical troubles led the list of causes of automobile breakdowns, accounting for 16,085,000 service calls, or 24% of 64,965,000 calls last year from motorists in distress.

The flat tire, ranking second, continued to drop, with only 18% for flats, compared with 20% in 1959.

Based on reports from 20,000 service garages across the nation, the survey explained that heavy snows helped boost calls. Inclement weather also increased the summons for tow and wrecker service and for drivers "stuck in the snow or mud."

Number three cause of breakdowns was ignition trouble, accounting for more than 9,108,000 calls, or 14% of the total.

Starter troubles, in sixth place, resulted in some 2,949,000 breakdowns, or over four per cent.

"Out of gas" continued to plague motorists, with 2,150,000 calls—an increase of more than 200,000 over the previous year.

Others were: carburetor, 1,936,000 calls; gas line, 1,351,000; brakes, 1,313,000; lock and key, 929,000, and lights, 169,000.

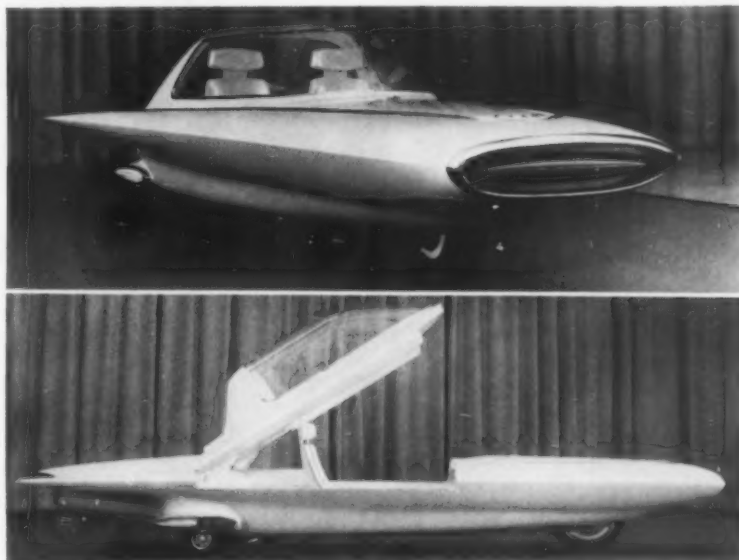
## Tarheel Dealers Elect Seven Directors

**S**EVEN district directors elected by the North Carolina Automobile Dealers Association are:

T. D. Hunter, Jr., of Hendersonville, Gene Hafer of Newton, Donald Clement, Jr., of Salisbury, H. E. Stephenson of Durham, R. O. McCoy, Jr. of Fayetteville, J. Fred Rippey, Jr. of Wilmington and T. I. Wagner of Greenville.

The directors will attend the board meeting to be held the first day of the association's Pinehurst convention—April 30.

That convention will feature an unusually heavy array of topflight executives from all five of the American car manufacturers, speaking on current topics.



Two running wheels instead of the usual four, together with a unique delta shape, mark the Gyron as a novel experiment in possible future automotive styling. Developed by Ford Motor Co. advanced stylists, the full-size dream car made its debut at the International Automobile Show which opened April 1 in the New York Coliseum. Ford stylists believe the two-wheeled vehicle could be stabilized by means of a gyroscope. Two small outrigger wheels toward the rear would provide stabilization when the gyro was not in operation. The Gyron is 209" long, 44.85" high, 86" wide and has a road clearance of 6½". It is inoperable in its present form.

## Tarheels Promote "Dixie" Valiants

**I**N COMMEMORATION of the Civil War Centennial being celebrated this year, Plymouth dealers in the Charlotte, N. C., region are offering a limited production 1961 four-door Valiant Sedan called the "Dixie Special."

The specially-built Valiant, available only in four Southern states, features a high gloss metallic color, Confederate Gray, special blue two-tone pleated vinyl upholstery and trim and a specially-designed "Dixie Special" symbol for the door.

## LANDER MISQUOTED

John H. Lander, Dodge-Simca dealer, Atlanta, Ga., was misquoted on page 13 of the March issue.

In referring to his remarks about dealer profits the article quoted him as saying "three per cent is considered a fair, expectable return on a dealer's investment." What he actually said was that "three per cent on a dealer's sales is a fair, ex-

pectable return."

The well-known Southern dealer, in calling SAJ's attention to the error, pointed out:

"The manufacturers have always tried to quote dealers' profits in comparison with investments — since dealers' profits are so low, that makes them look a little better. It has always been customary in our industry, however, to quote dealers' profits on a percentage of sales and that is what NADA always uses, and the figures that I was referring to on the chart were percentages of total sales."

## Orlando, Fla., Picks Stebbins

E. A. Stebbins of Central Florida Motors Co. (Lincoln-Mercury) is the new president of the Orlando (Fla.) Automobile and Truck Dealers Association. Other officers are Roger W. Holler of Holler Chevrolet Co. (Chevrolet-Oldsmobile), vice president, and R. R. Reed, Sr., of Reed Motors, Inc. (Rambler-Willys), secretary-treasurer of the association.



**358 REASONS TO RELY ON ROGERS!** Only Rogers offers 358 models of remanufactured engines. Old models, late models, 4-cylinder, 6-cylinder, straight-8 or V-8 engines . . . partial or complete assemblies. 704 distributors throughout a 12-state area give fast service on any model because overnight deliveries are made from nine strategically located Rogers warehouses. Assured quality—every Rogers engine is remanufactured to meet original equipment standards. A written guarantee on each engine protects you and your customer. 358 models, quality engines, guaranteed performance, and easy availability make your Rogers Remanufactured Engine distributor the place to go for exchange engines!

**ROGERS**  
Remanufactured  
**ENGINES**

## 25 NADA Meetings Aim to Aid Dealers

**A**LLEVIATION of the "business and financial crises" confronting the franchised new-car and -truck dealers of the nation is the objective of meetings of dealers to be held in 25 cities across the nation, including 13 in the South and Southwest, beginning the week of April 17, the National Automobile Dealers Association announced March 23.

Many advisory committee members will speak on the programs, to be presided over by members of the industry relations committee and the special task force committee created by a general resolution adopted by the NADA directors earlier this year.

Composing the task force committee, appointed by Walter B. Cooper of Fort Collins, Colo., president of

presented to the manufacturers for consideration at early conferences now in the process of being scheduled."

The field meetings, to which all dealers are invited, will be held in Boston, New York City, Pittsburgh, Baltimore, Washington, Charleston, W.Va., Richmond, Va., Charlotte, N.C., Atlanta, Miami, New Orleans, Louisville, Detroit, Chicago, Minneapolis, Omaha, Kansas City, Oklahoma City, Fort Worth-Dallas, Albuquerque, Denver, Butte, Mont., Portland, Ore., San Francisco and Los Angeles.

Following these sessions the task force will again convene with the manufacturers to report and discuss the results of this coast-to-coast inquiry.

According to Chairman Galles, the task force objectives are both short and long range. Its immediate goal, he outlined, "is to find some speedy means of relieving the depressing conditions of the industry which are threatening the dealer body with financial ruin and deteriorating the quality dealers' morale."

The current crisis, he added, is acute, and it is killing the enthusiasm for the business of reputable and previously successful dealers.

"Coincidentally," Galles stated, "our committee hopes with the aid of a long-range program to revitalize the franchised dealer system and to devise means of preventing a recurrence of the problems which have given rise to this continuing series of crises which have afflicted the industry in the postwar years."

"Our aim is to protect and strengthen the franchised dealer system and to assist our industry in gaining and maintaining its proper position as the bulwark of our nation's economic well-being."

Meanwhile, early this month some dealers reported to SAJ very little signs of the usual spring upturn in new-car sales, expressing inability to account for this.

## Studebaker Pickups Get Automatics

**A**N AUTOMATIC transmission is available for the first time on the one-half-ton Studebaker Champ pickup truck, L. E. Minkel, Studebaker-Packard vice president of marketing, announced.

The transmission offer is applicable to the model of 5,000 pounds gross vehicle weight, equipped with overhead valve, six-cylinder engine.



Task Force Chairman Galles

NADA, are H. L. Galles, Jr., chairman (Cadillac-Oldsmobile-Chevrolet), Albuquerque, N.M.; Sam H. White (Oldsmobile), Houston, Texas; John H. Lander (Dodge-Simca), Atlanta, Ga.; R. F. Pulliam (Ford), Columbia, S.C.; Henry Schleeter (Studebaker), Houston, Texas, and Preston Williams (Rambler), Washington, D.C. All have been prominent in either their national or state associations and all have been active in their factories' dealer councils.

NADA announced:

"The task force has compiled a comprehensive outline of the most frequently defined critical problems of the industry, supported by factual data, and suggested remedies for the industry ills which will be pre-

New and retiring officers of the Atlanta (Ga.) District's Ford Dealers Advertising Association who met recently at the Grand Hotel, Point Clear, Ala., for the group's annual committee meeting are (l. to r.): front row, J. N. Thomas, Sr., of Thomas Motors, Gadsden, Ala., retiring president; W. C. Vaughan of Roswell Motor Co., Roswell, Ga., 1961 member-at-large; G. H. Malone of Malone Motor Co., Dothan, Ala., president; J. R. Israel, Jr., of Adamson Ford, Inc., Birmingham, Ala., secretary-treasurer; back row, Fred Yando, Ford Division, Southeastern regional manager; E. H. Chamberlain, representative of J. Walter Thompson Co.; Phil A. Boykin of Universal Motors, Hapeville, Ga., retiring member-at-large; B. H. Brown of Bert Brown Motors, Inc., Chattanooga, Tenn., retiring secretary-treasurer, and James M. Moore, Jr., Atlanta Ford district sales manager. Absent from the photograph was Vice President C. M. Daniel of Ernest G. Beaudry, Inc., Atlanta. The committee represents approximately 200 Ford dealers throughout Georgia, Alabama and parts of Tennessee and North Carolina.



# Climatic Air presents the **CLIMATROL VALVE**



## What a Thermostat Does...

The thermostat is an accepted method for controlling the cycling of an auto air conditioner to prevent evaporator coil "freeze-up." Climatic Air's "Clima-stat" control cycles the unit by de-energizing the automatic clutch. *ALL* Climatic Air units have an automatic clutch.

The "Climatrol" valve has all the advantages of "Clima-stat" plus the features listed herewith. The "Climatrol" valve is a flow control device and not a by-pass valve! It represents the latest improvement for getting Climatic Air units "the COLDEST — the QUICKEST!"

## advantages of "CLIMATROL" COOLING

- 1 — You can dial a constant pre-determined temperature.
- 2 — Instant COOLING, completely automatic, No FREEZE-UP!
- 3 — Less horsepower "pull" on compressor; Better gas mileage.
- 4 — Better cooling while driving in traffic and at reduced speeds.
- 5 — Unit allows more leg room by recessing further under-dash and occupying less total cubic footage.
- 6 — Reduces head pressures while maintaining constant cooling.
- 7 — Clutch is not cycled — lowering strain on it and lessening wear on belts, mounts, and other parts of the drive mechanism.

*Another Exclusive from*



3030 CANTON STREET • Riverside 1-3837 • DALLAS 26, TEXAS







*with*

**WORLD  
BESTOS**

*and*

**GROW**



*with*

**BIG**  
**brake**  
**and PR**

# **GGER** **lining sales** **PROFITS**

## **8% to 10% yearly increase...**

"We just never have a customer complaint with World Bestos brake lining . . . and are confident that complete customer satisfaction is the most important factor in our 8% to 10% yearly increase in brake sales and service."

MR. HENRY KRAEKEMIER, *Manager of Superior Spring & Mfg. Co., Hartford and New Haven, Connecticut.*



## **unusual increase in sales and acceptance by trade**



"We have enjoyed an unusual increase in sales of World Bestos brake lining and Bonded Brake Shoes. We have handled the line for 22 years and are well pleased by its acceptance by the trade . . . top quality merchandise, amply advertised, supported by a good sales program . . . a line with which we can grow."

MR. M. D. (BUCK) TAYLOR, *President of Taylor Parts and Supply Co., Alabama and Florida.*

## **sales increased 1000%...**

"Our sales of friction materials have increased nearly 1000% since we changed to World Bestos about 2½ years ago . . . and are still on the increase. We never realized how much sales volume could be obtained until we changed to World Bestos."

MR. A. P. CUSACK, *Standard Supply & Service, Syracuse, N. Y.*



## **success proves selling strength...**

"During the 10 years we've handled World Bestos, our remarkable success in the brake lining business has proved the extra selling strength of the World Bestos line . . . complete coverage of cars and trucks . . . highest quality lining . . . plenty of sales help."

MR. A. C. NELSON, *Nelson Sales, Los Angeles, California.*

**The WORLD BESTOS program is designed to help you sell more brake lining! Here's how...**



## **WORLD BESTOS** gives you the **PRODUCT** the **PROGRAM** the



with **WORLD BESTOS** for the most complete coverage on **BONDED SHOE SETS**



**"PF"** (Prescribed Friction) Bonded Shoe Sets are the backbone of a powerful sales program that has helped distributors realize substantial sales increases. Dry-mix, rigid-molded **"PF"** lining has won wide trade acceptance for its controlled braking action, superior fade resistance and longer lining life. Above all, competitively priced **"PF"** Bonded Shoes bring in *top profits* both for distributors and dealers. **"PF"** Bonded Shoe Sets are supplied for all passenger cars, including compacts and popular foreign models. Also available in packaged segments for riveting.



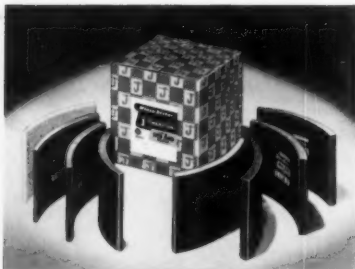
**"PFT"** (Prescribed Friction Truck) Bonded Shoe Sets are engineered specifically for trucks and buses up to and including 2½ tons. World Bestos dry-mix, rigid-molded **"PFT"** is an exceptionally tough, durable lining that's built to withstand abuse and give long, dependable service. **"PFT"** is a *top-profit* line . . . a highly effective "opener" for fleet accounts and for dealers who specialize in top quality, guaranteed service. **"PFT"** Bonded Shoe coverage includes all light and medium trucks and buses. **"PFT"** also provides complete coverage in packaged segments for riveting.



**"GL"** Bonded Shoe Sets are a lower cost companion to premium **"PF"** and **"PFT"**. Equal or superior to anything in its price range, **"GL"** is a molded, brass-chipped, more resilient lining that gives a "softer" pedal action and seats almost from the first brake application. **"GL"** is preferred by many users for its lower price and consistently good mileage. Excellent profit and discount structure make it popular with dealers. **"GL"** Bonded Shoe Sets give full coverage of all popular passenger cars, light and medium trucks and buses. Also available in packaged segments for riveting.



with **World Bestos** for famous **NO-FADE** (heat or water) **RED BLOCK** and



Ten years of service on leading truck fleets across the nation prove conclusively that the World Bestos Red Block Combination stops brake fade caused by heat or water, insures greater brake safety, reduces drum wear and damage, gives more miles between relines and requires less maintenance. It's the only *No-Fade* (heat or water) brake block combination. A premium profit item and powerful sales tool in the heavy-duty market. Packaged in single axle sets for all trucks, tractors and trailers in severe service.



**"BB"** heavy-duty Brake Blocks in variety of friction and combinations for no fade service needs of trucks, tractors and buses using blocks of thickness or greater.



the **PUNCH** you need to sell more accounts . . . make more profit!

ETS

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folded,  
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good  
count  
dealers.  
cover-  
light  
Also

and "BB" BRAKE BLOCKS



ty Brake  
of frictions  
for normal  
cks, trailers  
blocks 1/2"



Industrial lining and blocks  
plus segments, rolls, slabs and  
sheet stock that may be cut to  
size for industrial and auto-  
motive needs. Variety of fric-  
tions and combinations.

LITHO IN U.S.A.

**with**  
**World Bestos for**  
**the industry's most**  
**effective**  
**OBSOLESCENCE**  
**PROGRAM**

1 Once a year, on request, a  
World Bestos representative  
will help you take physical inven-  
tory of your brake lining stock,  
assist in making stock adjustment  
and recommend items for return.

2 Annual inventory keeps your  
stock up-to-date, clears your  
shelves for live merchandise, facil-  
itates fast turnover.

3 World Bestos will grant up to  
one full year for return of  
obsolete merchandise. Any World  
Bestos item appearing in the price  
schedule may be returned to the  
factory with *no handling charge*  
within 30 days after receipt.

4 World Bestos' liberal obso-  
lescence and returned goods  
policy helps keep your stock in-  
vestment at the lowest practical  
level . . . reduces overhead, mer-  
chandise losses and handling costs.



**with World Bestos for the first and still the**  
**finest BRAKE SERVICE STATION PROGRAM**

Package program contains every-  
thing needed to sell service stations  
and independent repair shops . . . a  
rich, virtually untapped market.  
Kit, shown right, is given free with  
each initial stocking order of World  
Bestos Bonded Brake Shoes. It gives  
detailed information on how to sell  
brake service, instructions for serv-  
icing and relining hydraulic brakes  
plus all material needed for local  
sales promotion.



**with competitive pricing . . . a sound and**  
**attractive PROFIT and DISCOUNT STRUCTURE**

All World Bestos Bonded Shoes, blocks and friction materials are priced  
competitively with comparable products offered by other manufacturers.  
Liberal discount structure insures *fair and full profit*.



**with World Bestos for comprehensive**  
**SALES and ADVERTISING HELP . . . the**  
**PUNCH that drives home profitable, proven**  
**features of the World Bestos line**

Consistent advertising schedule in leading automotive trade publications  
paves the way for your salesmen . . . *reduces your selling costs.*



Up-to-date catalogs and price lists  
are carefully organized and indexed  
to save time.

Missionary help and brake clinics  
are available direct from the World  
Bestos factory; also signs, posters,  
envelope stuffers, ad reprints, brake  
service manuals, book matches, at-  
tractive packaging, mechanic's caps,  
mailers, ad mats, radio spots, decals,



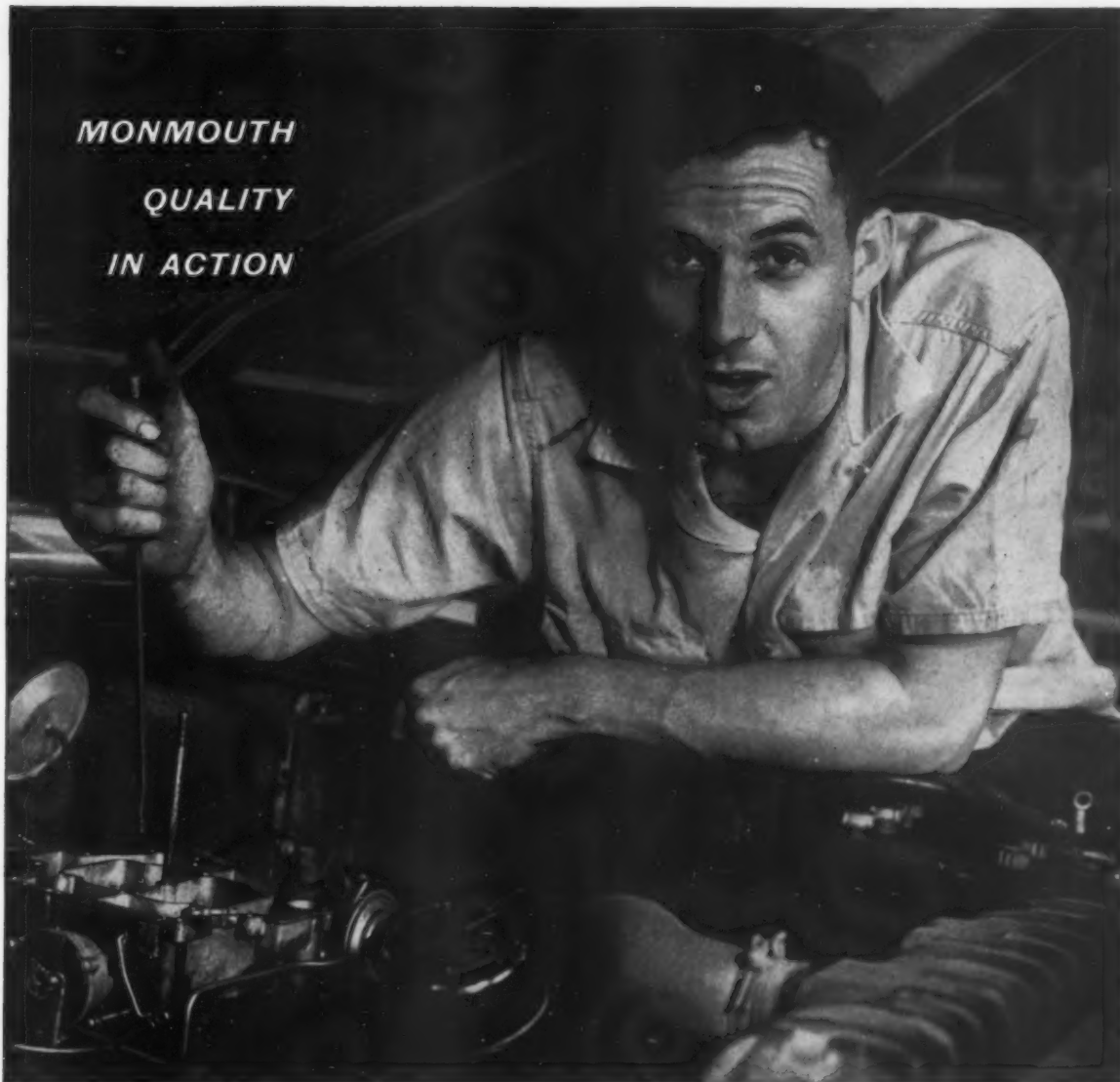
booklets, key tags . . . everything you need to take a commanding lead  
over your competition.

No matter how "adequate" your present line may seem . . . you can *GO*  
with **WORLD BESTOS** and *GROW* with bigger sales . . . *bigger profits!*  
Write today for complete details.

**WORLD BESTOS** NEW CASTLE, INDIANA  
WORLD'S FINEST BRAKE LINING



**MONMOUTH  
QUALITY  
IN ACTION**



## **"Bearings? We've always used Monmouth..."**

... as far back as I can remember. My father was in business here for 38 years and you might say that I grew up with Monmouth. Our reputation for quality work means a lot to us. That's why we've stuck with Monmouth—they always give us a good performance."

For quick service on top-quality bearings call your nearby NAPA jobber. He has the complete line of Monmouth bearings backed by Monmouth service.

says John Robinson, Owner  
Robinson's Auto Repair Shop  
Jackson, Mississippi

## **MONMOUTH Engine Bearings**

**CLEVITE SERVICE:** Cleveland Graphite Bronze • Division of Clevite Corporation • Cleveland 3, Ohio



*For Top Values in  
Top Automotive Lines*



*See Our Representative*

**HIRSIG - BRANTLEY CO.**  
AMERICAN NATIONAL BANK BLDG.  
JACKSONVILLE 7, FLORIDA



**ONLY**

**McQUAY-  
NORRIS**

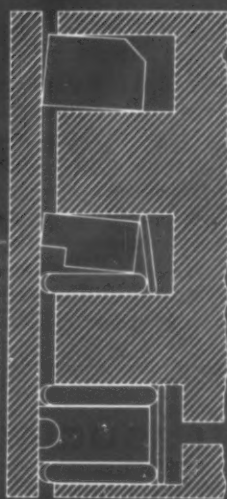
**PISTON RINGS**

give  
you...

**7 WIPING EDGES**



**—to restore lost compression and  
horsepower... eliminate oil  
consumption.**

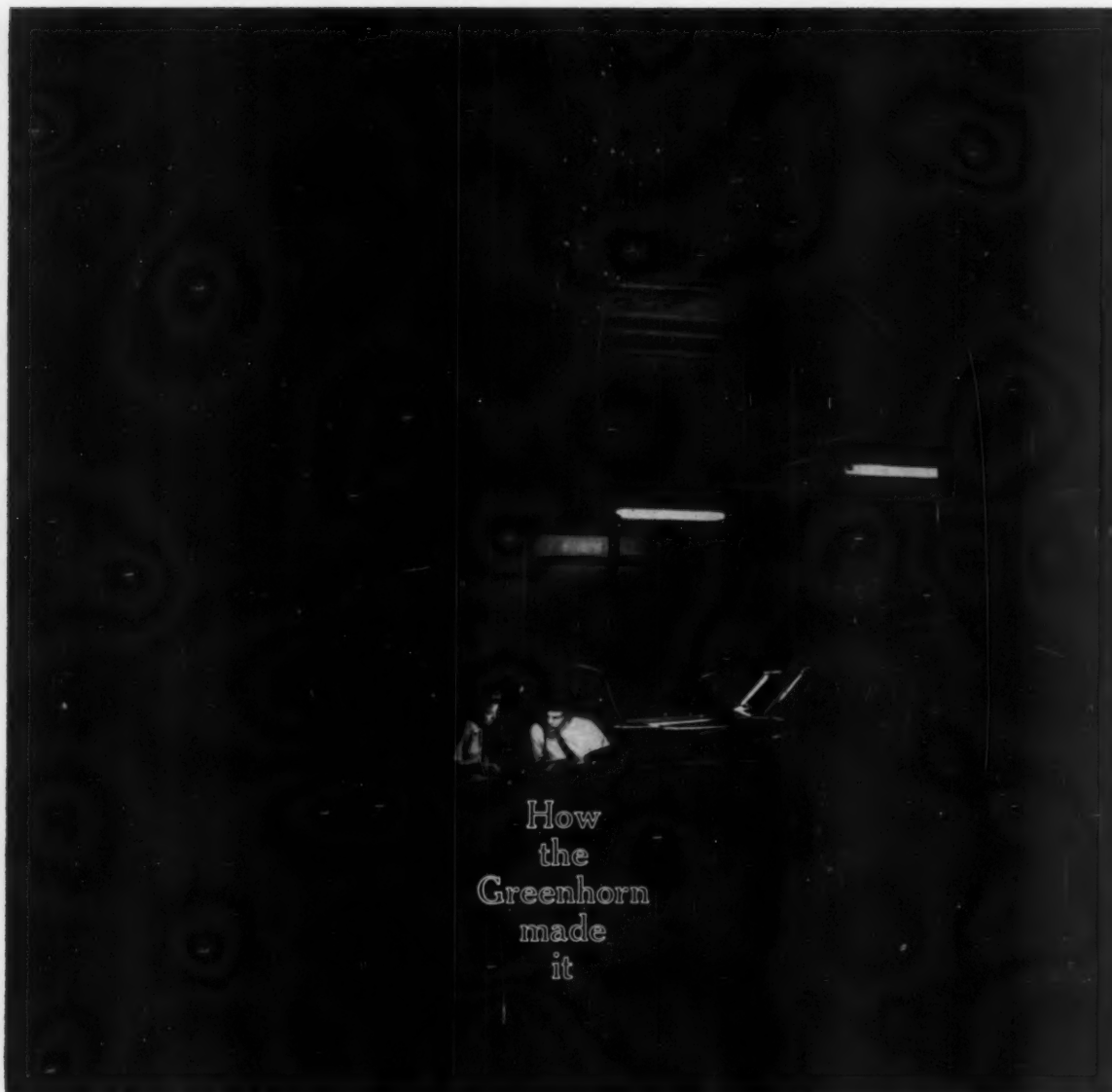


**7  
WIPING  
EDGES**

The famous Leak-Proof piston ring set (including the outstanding ".400" oil ring) has seven wiping edges. No other ring set has so many wiping edges to save your customers gas and oil.



McQUAY-NORRIS MANUFACTURING CO., ST. LOUIS • TORONTO



## How the Greenhorn made it

### "What are friends for . . . ?"

"The kid was 25 years old," said the Salesmanager, "and he'd never sold anything in his life. I told him we had absolutely no room in the dealership for beginners, but he kept coming back. I told him he had no clientele, no experience, and few prospects. But he wouldn't take 'no'. So I made him a deal. I offered him a desk, a phone, business cards, and the use of a demonstrator during business hours. He got no salary, no draw, no floor time, just our regular commission. And he was to bring all prospects to me for closing. It was sort of a glorified bird-dog arrangement, but he took it.

"Everybody called him the Greenhorn, but he was too busy making phone calls and writing cards to mind. He was credited with four sales the first two weeks. Then his sales fell off for a while. But now he's back up with the veterans. They call him the Eager Beaver, and he's going to make it. How did he do it? Simple. He was born and raised in this town, so he sat down with his girl friend and a little black book and they put down the names of every single, solitary soul they knew. 'What are friends for,' he asked, 'if you can't ask them to help you?' He was certainly right." The story above is condensed from

the current *Profit Pointers*, the monthly Associates publication. This issue, like all of them, is devoted to an aspect of agency management of genuine importance—in this case, prospecting. If you'd like a copy, contact your Associates representative and we'll be delighted to put you on the list. It's free, of course—a part of the extra service we give at The Associates.

**THE ASSOCIATES**  
INVESTMENT COMPANY • South Bend, Ind.  
Associates Discount Corp. • Associates Discount  
(Canada) Ltd. • Emmco Insurance Company



# Van Norman 570 ROTARY BROACH

Earns EXTRA PROFITS for you  
because it's extra fast



One set-up . . . one pass . . . one cut. That's all it takes to turn out precision machining of cylinder heads, engine blocks and other surfaces with the 570 Rotary Broach! Look at the many ways it cuts your costs, pays you bigger profits with less work:

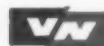
- Set-up time about 60 seconds.
- Resurfaces average cylinder head in less than 8 minutes.
- Micrometer controlled stock removal.

- Requires no attention from operator once automatic traverse feed is set in motion.
  - Less floor space needed than with any other machine approximating its capacity.
  - Tool-sharpening fixture is available for resharpener cutters. Not necessary to return cutters to factory.
- Learn all the benefits in having this extra-profit-maker in your shop. Contact Van Norman now.

4139

QUALITY IS THE REASON—IT PAYS TO VAN NORMANIZE

**VAN NORMAN**  
Springfield 7, Massachusetts  
A DIVISION OF VAN NORMAN INDUSTRIES, INC.



# 15 SECONDS

and a dime



...and this Delco-Remy





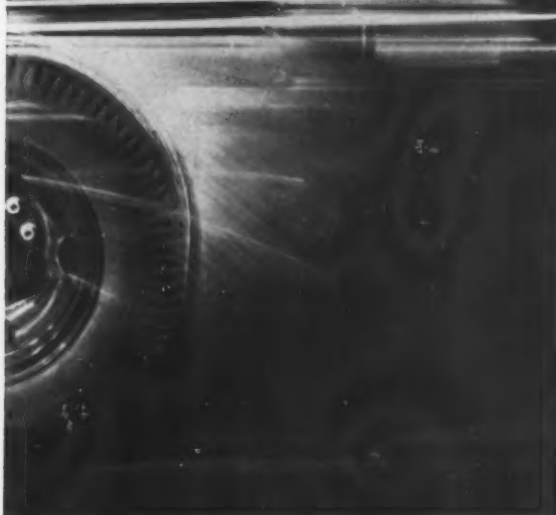
... Double Contact  
Voltage Regulator is Adjusted  
Accurately to a New Setting



Delco-Remy's External Adjustment Regulator shrinks a fleet's voltage-setting downtime to seconds. The only tool needed is a screwdriver—or a dime. No electrical checking equipment or warm-up period required. Accidental out-of-limit settings are simply impossible. ■ Changing from city driving to country? Or from winter to summer? Voltage settings can be adjusted almost instantly—and you know what that means to batteries and electrical systems. Longer life. Extra dependability. ■ Another thing: This new regulator has life-prolonging Double-Contact design that keeps generator voltage under strict control at every speed. How long will this Delco-Remy Regulator last? Almost twice the life of an ordinary regulator. ■ See how Delco-Remy piles one economy atop another? Insist on Delco-Remy Double Contact External Adjustment Voltage Regulators for every car and truck you own. They're painstakingly designed to save you money.

**Delco-Remy**  
**electrical systems**

FROM THE HIGHWAY TO THE STARS  
DIVISION OF GENERAL MOTORS • ANDERSON, INDIANA



# Does the **AP** 15-Minute Installation Read what just a few of our



Charlie McCafferty, owner of the Esso Station in Media, Pa.: "We didn't get into the muffler business until AP came out with the gun deal, but then we really got in. With the AP clinic and Muffler Service Manual it took our men no time at all to learn how to do a muffler job in 15 minutes. The very first month we took in \$300 that would have gone down the street to competition if we hadn't pulled them in with our A-board. Not a week goes by but we do a rousing business in mufflers and pipes."

# Claim Sound Too Good to Be True? many enthusiastic dealers say



Nick Wagener, Wagner's Sunoco Service, Maumee, Ohio: "We used to lose a lot of business because we weren't equipped to do 15-minute muffler installation work. We were keeping the shop down the street busy by sending them our customers. No more of that now that we have the AP gun and 15 min. installation sign. Now we keep the business and make the dough ourselves."



Thomas Askins, Merl's Sunoco, Lambertville, Mich.: "Frankly, I was a little skeptical at first about this 15-minute installation stuff and to tell the truth some jobs do take a little longer. But I find my customers don't hold a stop watch on me. If a difficult job runs five or ten minutes over they don't squawk. The idea is the job can be done while they wait."



Charles A. Caleri, Bab's Auto Service, So. Weymouth, Mass.: "We're sure glad we cast our lot with AP when we decided to take on muffler work. You fellows give us all the technical and merchandising help anyone could ask for, your product is top quality, your deals are clean and money-makers and that AP gun makes muffler work a snap."



Joseph F. Di Pri, Canton Ford, Riverside, N. J.: "You couldn't buy back that AP muffler gun from me at twice what I paid for it. When I think how we used to struggle to get a rusted muffler or pipe off a car, I realize I've got the answer in the AP gun. Most jobs take no more than 15 minutes and I don't have to neglect my regular station services."



**SELL 15-MINUTE INSTALLATION...  
THE PROFIT PART  
OF YOUR BUSINESS**



Your prospects are made aware of the AP name through 45,000 A-boards and 4-color advertising in the Saturday Evening Post.

**THE AP PARTS CORPORATION**

9-Q AP Building • Toledo 1, Ohio

**AP MUFFLERS ARE SOLD BY MORE DEALERS THAN ANY OTHER BRAND**

# When You become a



## WAGNER® LOCKHEED® FRANCHISED DEALER



YOU'LL HAVE  
THE  
**KEY**  
TO PROFITABLE  
BRAKE SERVICE  
BUSINESS

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WAG-1-A

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What with the muddle of makes and models on the market today, One-Stop Shopping gives new-car prospects just what they want. A new, easy way to find the car they want at the price they want to pay, without having to shop all over town. Sounds like a big promise, and it is! But with a whopping variety of 31 models to pick and choose from under one roof—new Chevy Biscaynes, Bel Airs, Impalas, six full-sized wagons, a full line of thrifty Corvairs, and the Corvette—it's a rare customer, indeed, who could ask for anything more. As it's turned out, Chevrolet dealers couldn't be happier with the way One-Stop Shopping is catching on. Because once people drop into their Chevy dealer's and take a good look around, they're just about sure to like what they see, and buy it. Which is what's happening every day in Chevrolet showrooms everywhere... Chevrolet Division of General Motors, Detroit 2, Michigan.



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New '61 Chevrolet IMPALA 2 DOOR SEDAN



New '61 Chevrolet 2 DOOR BISCAYNE 6



New '61 Chevrolet 500 LAKESIDE STATION WAGON



New '61 Chevrolet BEL AIR 2 DOOR SEDAN



New '61 Chevrolet 350 CORVAIR CLUB COUPE

See the new Chevrolet cars, Chevy Corvairs and the new Corvair in your local authorized Chevrolet dealer's

## Chevy can match your personality...and then some!




CHEVY  
SHOWROOM  
'61 STYLE!

These new Chevrolets are the people-pleasing cars you'll find everywhere. Their new, easy-to-use doors give you extra inches of clearance outside for tight turns and easy parking. Yet you also get extra inches of comfort for feet, knees and elbows—thanks to design like door openings as much as 6 inches wider, higher seats and a trimmed-down dashboard tunnel. The going is easier, too, with Chevy's Jet-smooth ride to glow over even the roughest roads. There's even a new


trunk that opens at bumper level for easier loading. And, with the widest model choice ever, your Chevrolet dealer now offers one-stop shopping for just the car to suit your taste and your budget. They're in and now: 1—Impala Custom, 2—Nomad, 3—Passenger Station Wagon, 4—Bel Air Sport Coupe, 5—Impala Sport Sedan, 6—Impala 2-Door Sedan, 7—Bel Air 2-Door Sedan, 8—Corvette. Chevrolet Division of General Motors, Detroit 2, Mich.



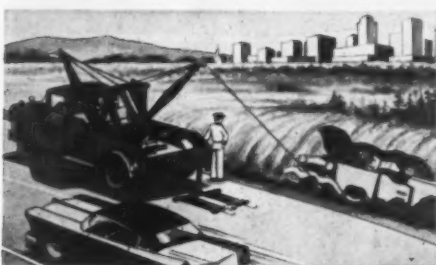


**FRANK THOMAS**  
HOLMES Factory Representative in charge of Sales and Service for South Carolina, Georgia and Florida

**"Let HOLMES FLEXIBLE<sup>\*</sup> ACTION BROADEN YOUR EARNING ABILITY"**



**HOLMES 470 MODEL**



All HOLMES Double Boom models provide 360° working area with power for pulling with either or both service lines. Booms may be positioned for anchoring on one side, pulling from the other — without blocking road passage. Other features include Outrigger Legs and Dual Rear Controls for maximum safety of operation.

**\* ENGINEERED to MASTER the MOST DIFFICULT RECOVERY JOBS!**

Here's How the flexible action of a HOLMES WRECKER will broaden your Service operations: Use of such a unit will permit you to *go miles away* — *service more customers* and *handle a wider variety of work*. Holmes Engineering provides the best possible use of Truck power for the efficient handling of all types of recovery and towing jobs. Being in a position to render such all-round service is a valuable business asset which will pay you handsome dividends in TOWING FEES, PARTS SALES, BODY WORK and SERVICE JOBS.

There are 7 Holmes Wrecker Models, varying in price and ranging in size from 3 to 40 ton capacity, that can NOW be purchased on a long term, easy pay plan.



Send TODAY for full details. Let us show HOW the flexibility of a new HOLMES WRECKER will make money for you!

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Chattanooga 7, • Tennessee



makes them

King  
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...LINDER KITS. WHEEL CYLINDER KITS. MASTER  
...MASTER CYLINDER KITS. WHEEL  
...HYDRAULIC CLUTCH REPAIR  
...KITS AND CYLINDERS. MA  
...S. POWER BRAKE KITS  
...S. WHEEL CYLINDERS. B  
...ES. CYLINDERS AND KITS  
...FOR IMPORTED CARS. POW  
...RS. POWER BRAKE PARTS  
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**PISTONS**—Precision-machined and ground. Fitted with EIS improved, ribbed, non-leak Secondary Cup!

**MAIN CUP** — MADE OF HEAT-RESISTANT COMPOUND! Designed with a razor-sharp sealing edge and moulded with tapered grooves to permit proper passage of fluid in the backstroke operation. Moulded-in brass ring protects cup from extruding into piston by-pass holes!

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**BORE** — Bearingized and finished to close-precision-tolerances for proper seal and lubrication by the hydraulic brake fluid!

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**OUTLET PORTS**—All are lead screw tapped. Assures full, precision threads, leakproof construction . . . prevents cross-threading!

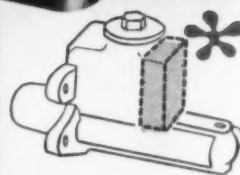


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passenger cars now have \*fluid  
reserve tanks that are 20% larger!

EIS has created an EXTRA margin of safety in all master cylinder replacements for GM 1959-'60 and '61 passenger cars by increasing their fluid capacity by 20%!

When master cylinders call for a re-fill, be sure to use EIS 500 or EIS 703 Heavy-Duty Brake Fluid. They're SUPER-QUALITY . . . and they exceed SAE specifications 70R1 and 70R3!





**APRIL 1961**

# Safety-ize the Shop

**By S. M. DuBOIS**

Vice President, Universal Underwriters Insurance Co.  
Kansas City, Mo.  
(E. M. Lynn, President)

**S**TATISTICS from insurance company files, the National Safety Council, state and local fire authorities and other industrial safety organizations reveal that automotive shops are not "safe" places to work or operate.

Surprisingly enough, the disabling accident frequency in garages, for example, is greater than in such so-called "hazardous" occupations as steel, glass, shipbuilding, sheet metal and foundries.

The picture is even darker when we consider that these comparisons are based upon only disabling injuries and do not include the effect of minor injuries requiring only first aid or "no time lost."

It is apparent that men engaged in shipbuilding, for example, know that their work is dangerous—a misstep can be fatal.

The garage mechanic, machine shop lathe operator or service station attendant isn't as "safety conscious," but he very well should be, and it will be management's task to make him so. The only alternative is a continuing rise in accident frequency, the loss of productive man-hours, the hardships of unemployment or disability, higher insurance rates and costly shut-downs.

In addition to the personal injury

aspects of the problem, the same accident which destroys a life or disables a worker can—and frequently does—cause substantial loss of property, interruption of the business and resultant loss of profit.

Although not all aspects of these two facets of the "safety problem" can be solved by the same measures, it is fortunate that many of them can.

Management (represented by the owners)) should be self-appointed inspectors—and enforcers—of the plant safety program.

Here are some ideas:

First, make a personal inspection of the entire shop area, including loft and storage area. Look for congestion, poor lighting, accumulation of waste materials and packages,

dirty floors and equipment. Check the condition of wiring, light fixtures, tools, benches, heating devices, signs and other items. Check the stability of stairs, bannisters, handrails, overhead doors, pit guards and any other items used as safeguards or passageways.

Second, determine if the safety equipment available is really usable. Is it in place? Is it serviceable? And most important, is it being used properly?

Your inspection will include lifting equipment, guards on equipment for eye and hand protection, automobile jacks and metal stands, safety glasses or goggles and any other such equipment. This material is costly—and even more so if it is not in proper use.

This inspection usually reveals obvious points where accidents can occur and where simple, inexpensive means can be used to prevent them.

The initial inspection described here by the management is not designed to qualify the inspector to prescribe a cure for all hazards. Where electrical items are in questionable state of repair or maintenance, qualified electrical service should be obtained. A great number of costly fires and serious personal injuries result from makeshift or "do-it-yourself" electrical repairs.

In addition to obvious conditions due to wear and tear, all wiring should be inspected annually by a competent electrician.

"Oversize" fuses or pennies used in power circuits destroy the value of the fuse as a circuit breaker—and

The reading time for this article is a mere few minutes. In that brief period, thousands of dollars in property value and revenue potential will be destroyed by fire, explosion and other PREVENTABLE causes. In the same interval, untold numbers of people will be injured, maimed, disabled or killed by PREVENTABLE accidents. A proportionate share of this frightening loss will be borne by those operating garages, automobile dealerships, service stations, machine shops and other automotive businesses. Perhaps we should ask the question:

**"IS YOUR SHOP 'SAFE' AT ALL?"**



## USE AND MAINTENANCE OF APPROVED FIRE EXTINGUISHERS



	MINIMUM SIZE EXTINGUISHER PER 2500 SQ. FT. FLOOR AREA				
	DRY CHEMICAL	FOAM	CARBON DIOXIDE	SODA ACID	WATER TYPES
<b>CLASS A</b>  Fires which require quenching and cooling. (Lofts, general storage areas and display rooms)	NOT A QUENCHING OR COOLING TYPE EXTINGUISHER, BUT WILL CONTROL SMALL SURFACE FIRES.	ONE 2½ GALLON OR LARGER	NOT A QUENCHING OR COOLING TYPE EXTINGUISHER	ONE 2½ GALLON OR LARGER	ONE 2½ GALLON OR LARGER
<b>CLASS B</b>  Flammable liquids and fires requiring smothering action. (Oil & Grease storage areas, show areas)	ONE 1½ GALLON OR LARGER	ONE 1½ GALLON OR LARGER	TWO 6 POUND UNITS OR ONE 7½ POUND OR LARGER	NOT A SMOTHERING TYPE EXTINGUISHER	NOT A SMOTHERING TYPE EXTINGUISHER
<b>CLASS C</b>  Electrical Fires (All electrical motors, signs, service boxes, and fuse boxes.)	ONE 6 1/4 POUND OR LARGER	DO NOT USE ON ELECTRICAL FIRES	TWO 6 POUND UNITS OR ONE 7½ POUND OR LARGER (Must not have metallic horn).	DO NOT USE ON ELECTRICAL FIRES	DO NOT USE ON ELECTRICAL FIRES
<b>SUBJECT TO FREEZING</b>	NO	YES BELOW 27 degrees F.	NO	YES BELOW 27 degrees F.	YES UNLESS PROPER CHEMICALS ADDED

**EXTINGUISHERS MUST BE CHECKED ANNUALLY**

the fire which can result may do substantial damage to the property.

Proper grounds are needed on all electrical equipment to protect workmen from the dangers of electrical shock. In shop areas, only heavy-duty cords are recommended on extensions for lights and portable equipment.

One fire insurance company specializing in automotive risks such as garages and parts wholesalers considers the storage, handling and sales of flammable liquids its greatest source of fire loss. Gasoline and thinner are particularly dangerous if improperly handled.

Since these and other low "flash-point" solvents are present in nearly all garages, service stations and shops, extra care should be taken. Rules for the shop handling flammable liquids should be realistic and technically correct; they should be posted prominently—and enforced.

Gasoline vapors are easily ignited by sparks from electrical equipment, welding apparatus, open flame, cigarettes or static electricity discharge. All flammable liquids—gasoline, thinner, etc.—should be maintained in as small quantities as practical,

stored in "approved" containers and conspicuously labelled.

Fire extinguishers should be placed properly and must be of the proper content and size to be effective. Too often the location of the proper extinguisher is not even known to the men in the shop, inspection and re-charge are overdue or the proper extinguisher not available at all (see the accompanying chart).

Where spray painting is performed in any amount regularly, only a "standard" spray booth is adequate. Vapor-proof lighting is a must with proper ventilation facility installed and operating.

"Touch-up" painting in the open shop is equally dangerous, since it is frequently a part-time assignment and proper safeguards are ignored.

Smoking must be prohibited in paint spray areas, and respiratory equipment provided for paint personnel. Keep the paint booth and storage areas clean; maintain minimum thinner supply and keep exits and access open.

Smoking—the No. 1 cause of fires—should also be prohibited where work is done on gasoline tanks or

LPG vehicles, and in loft and storage areas. Many shops prohibit smoking altogether except in specified areas. Fire insurance companies usually will provide "No Smoking" signs free of charge and can assist in enforcement of the rules.

Seasonal changes place heating equipment on a standby basis in the warmer months and with the first cold days, this equipment is often put into service without proper inspection for leaks, ventilation stoppages or breaks in the fire box. Where steam boilers are used, the added danger of major explosion makes an annual boiler inspection mandatory in some cities. Where no such requirement exists, it is up to the owners of the business to make certain that the equipment is safe. Failure to take these precautions can result in heavy damage from fire or explosion, death or personal injury—and costly lawsuits.

The first inspection by management will reveal the need to remove flexible or soft metal tubes carrying gas or electrical wires from places where they are subject to injury by automobiles, tools or pedestrian traf-

(Continued on page 84)

# He Rings Doorbells to Sell Safety

By BILL ABBOTT

**J**ERRY Heinzen sells safety. He sells it by the bagful. He rings doorbells the year around to do it.

His profits are commensurate with his efforts. He has a flourishing and growing service station at a busy corner at 34th Street South and 18th Ave. in northwest St. Petersburg, Fla., and can cite a steadily climbing sales chart for petroleum products, TBA and services.

He can enumerate a long list of prize quota bonuses for nearly every line he sells for both himself and six permanent employees. These include a recent trip to Nassau for himself and wife, frequent steak fries and outings for his employees, an endless assortment of premiums, such as radios, electric razors, luggage and sports equipment, plus hard cash for all.

Every bit of it comes from sales of safety, yet Jerry claims no corner on the market and no magic formula. He insists that "safety is something everybody needs, and anybody can sell it with work and a little imagination."

Jerry warned, however, that successful safety sales are more than the temporary enthusiasm generated during a blitz for prizes on special quota items.

"Safety can sell anything — gasoline, oil, tires, services, accessories," he said, "but you have to keep after it constantly and continuously. We try to never let a customer leave this station without exposure to a suggestion of safety in some form or fashion."

For example, Jerry and his men never ask merely, "May we check your tires?" It is always, "May we safety-check your tires?"

Every departing customer is sent on his way with an expression of appreciation for his business, and the admonition, "—have a safe trip."



Jerry Heinzen sells by pushing safety. He's shown here with his "get acquainted" plastic bag which starts customers to his station where he sees that they get a safety-selling pitch covering a variety of parts.

But Jerry Heinzen goes much further than that on safety selling. He was actually forced into it. When he saw half a dozen new stations go up within a four-block radius of his location, he realized he had to get busy.

"I began to recognize several facts," Jerry recounted. "The first was that any new business is bound to draw some customers from an older business. In other words, the older location is always the loser to some extent. It means the established guy has to work harder."

"Then I realized that all of us had more or less the same things to sell. The problem was either to sell the same things harder, find something new, or, at least, new ways to sell."

Jerry accomplished all three alternatives with safety.

"I found," he said, "that safety, being everybody's business, is nobody's business. It's so free and so taken for granted that few people put a value on it. What you get for nothing

is worth exactly the price you paid.

"So, I began to sell safety. I put a price tag on it and found that customers like to buy it for their own confidence and self-satisfaction."

Jerry opened his anti-competition safety campaign with what he likes to call his "bag promotion" as the keystone of his continuing day-by-day sales program.

He bought 500 clear plastic bags, the kind used for laundry, food items and other merchandise. He printed a special circular, headed "Let's Get Acquainted," with his picture. The circular advertised a lubrication special, offering a plastic travel storage bag with each job, plus a safety service check. It said:

"Hello, I'm Jerry Heinzen. I operate your neighborhood Shell Service at 34th Street South and 18th Ave. I've been in business here for three years and many of you trade with me now. But I'm anxious to meet those of you who haven't been in.

Please take me up on my special lubrication offer and at the same time see how completely we safety-service your car."

The circular listed 18 services, including safety checks of transmission, differential, tires, battery, radiator, oil, brakes, horn, steering gear and lights.

Jerry put the circular, a can of household oil, state and city maps, local informational folders and several lollipops for children into the plastic bags. Then he set out on a door-to-door canvass for his safety services.

So far, the gift bags have gone mostly to newcomers in the neighborhood, and the Shell Co. has acknowledged that "Heinzen's bag promotion has been pretty close to miraculous." One out of four persons who received bags and a personal visit became regular customers, and another 50, merely hearing about it, have become regulars.

"But the bag would be a bust by itself," said Jerry, "without the personal visit and the safety pitch. Actually, you could do without the bag and just make personal calls in the interests of safety. People like to think they're safe in their cars, whether they are or not. And they don't mind paying for that satisfaction."

The idea has been so successful that the Floridian tries to devote at least two afternoons a week to it. Sometimes, during work lags which are becoming fewer and fewer, he lets employees go to meet new residents just to familiarize themselves with the program.

Although the home calls have resulted in several over-\$50 service tickets and numerous TBA sales, it is merely an introduction to the safety sales effort.

"The home calls just prime the



This sign above Heinzen's three service bays reminds customers and employees alike of the thoroughness of safety-checking cars regularly.

pump," Jerry explained. "The safety pitch really comes at the station. I start out by saying: 'I've never seen your car before. Mind if I safety-check it?'"

Once Jerry or an employee gets a go-ahead, he starts by wiggling the driveshaft, inspecting the universal joints and so on. The customer is immediately impressed by the thoroughness of the operation. This impression is heightened by a large sign above the station's three service bays that lists all the safety services of a lubrication job: check transmission, check differential, check tires, safety inspect under the car, check battery, check radiator, check oil, check brake cylinder,

check steering gear, lights, etc.

The sign serves as a reminder to employees as well as to customers of the varied operations necessary in a safety check. Jerry is convinced that no service station should be without one.

And here's another little trade tip that's worth remembering: Jerry always attempts to find something about a car that will need service in the near future — and mention it. Perhaps it is a leak in one cell of the battery, a tire rotation or a softening brake pedal. ("Oh, yes, there's one more thing you're going to need soon. Can you bring the car back next week?")

"Don't try to get it all at once," he said. "If you scare customers with a big bill all at once, they're not likely to come back. If a service need is not desperate, let it go until next time."

To be certain that his men are thoroughly indoctrinated with his safety sales idea, Jerry sends two at a time to his company's sales training center. He gives them paid vacations, group insurance coverage and a new work uniform for every one they buy. There's a cash bonus for them in many items that they sell: one dollar for every tire, ten cents for an oil filter, five cents for each quart of transmission oil, five cents for each quart of premium oil, etc. Temporary bonuses are offered from time to time on other items to keep things interesting.

The sale of discarded batteries is put into a fund for an annual pool-side party. When Jerry wins a sales contest he cuts in the employees with a steak fry for their families.

As a result of all these efforts and incentives—based soundly on safety—Jerry's station is a remarkably busy place and he intends to make it busier, again with safety.

Selling safety here is as routine as selling gas, oil and TBA items.





# Safety Belts Make Comeback

By **BARON CREAGER**  
Southwestern Editor

**T**HIS was a long, broad, straight highway in the South on a day of light traffic in the year 1970 when this traveling man drew up at a road-block manned by two highway patrolmen.

"What's up?" he asked the patrolman. "Checking driver licenses again?"

"Among other things," agreed the patrolman, who accepted and inspected the proffered license. Then he opened the front door on the driver's side, glanced in, closed the door, pulled out a pad and began writing a ticket.

"What now!" complained the traveler. "I was within the speed limit. My license is in order. What do I get a ticket for?"

The patrolman wrote silently, then handed over the ticket, saying:

"You're a resident of this state. You know we have a new law. That ticket is for driving without buckling your seat belt."

Fantastic? Not necessarily when you consider that two decades ago there were more states without than with a driver license law. And a decade ago, how many car owners worried about a vehicle safety inspection? Finally, there are the airlines, with mandatory rules about seat belts, on the theory that as long as the vehicle is on the ground, there is possibility of a sudden, violent stop, in which case the passengers don't also stop unless held in their seats.

Big difference is that all airlines provide seat belts. Airlines are more concerned with human welfare, evidently, than the individual vehicle owner, for only a relatively few motor vehicles—no more than two in 100—are equipped with seat belts.

But seat belts in motor vehicles are making a comeback that began in the third or fourth quarter of 1960 and will find more and more acceptance in the years ahead for several reasons:

1.—A deterrent to seat belt sales has been the argument that trapped passengers cannot release their belts. This is known as the threaded-type buckle. But a new belt introduces a metal-to-metal clip fastener sensitive enough to be released by fingertip pressure.

2.—Announcement has been made that all five American car manufacturers will include "installation aids" for seat belts as standard equipment on all 1962 models. This means that

necessary holes will be pre-drilled in frames, and apertures provided in floorboards, so that installation of belts will be greatly simplified.

3.—Writing in *Traffic Safety*, issue of March this year, publication of the National Safety Council, Tom Mahoney quoted Dr. Horace E. Campbell, chairman of the Colorado Medical Society's safety committee, as saying legislation is needed requiring all cars be equipped with safety belts and that motorists should not be given a choice of not having them "any more than they are given the choice of buying uninspected meat."

4.—Publicity has fanned public demand—publicity concerning incidents where seat belts have saved lives and estimates that belts would save at least 5,000 lives annually and, in addition, reduce serious injuries by 50%.

Publicity must be the explanation of a surge in seat belt sales that began late last year.

By mid-1960 at least two factories, possibly others, had stopped produc-

tion of seat belts because the market had practically vanished. Factory representatives had dropped the line and turned attention elsewhere. Sorry position of the safety belt market was illustrated by disappearance of display stocks, explained by one service station manager this way: "I never sold any and the boxes got so dirty and beat up I finally moved the stock back to the store room." His observation is that one car in 100 has seat belts.

Then in autumn of last year seat belt orders developed as if by magic. Factories reinstated their representatives and are back in production.

One illustration of what publicity can do is Fort Wayne, Ind., and the adjacent territory, picked for an experimental program in seat belt promotion by the American Medical Association, National Safety Council and U.S. Public Health Service. In the first six weeks of the program, 3,800 seat belts were sold, more than were sold in the entire previous year in the area. The experiment was to close in February, with findings to follow.

A representative of the factory that introduced the metal-to-metal clip buckle believes this number will be most popular, even at \$12.95 per single belt, because of its release feature. Installation cost currently is estimated at \$3.60 per belt, or a total of \$32.30 for two such belts in the front seat—compared with possible hospital bills of 100 times that.

A dealer gets this metal-to-metal clip belt for \$7.77, leaving him a profit of \$5.18 on belt only. Assuming he pays 40% for installation labor, he has \$2.16 profit on installation labor for a total profit of \$7.34 on one belt, \$14.68 on two.

However, there are other grades of safety belts, by this and other manufacturers. A car owner can drive in where belts are for sale and get them—for example—\$9.95 each and less, plus the same installation charge. The factory that makes the \$12.95 belt also makes one for \$6.95. Just how much official approval the lower-priced belts have, or what their tests show, will not be discussed here. But on the \$9.95 belt the dealer's profit would be \$12.98 per pair.

One of the announcements that all car factories in 1962 models will provide "installation aids for safety belts" came from Earl R. Beard of  
(Continued on page 92)

**Texan L. L. Colbert, chairman of the board of Chrysler Corp. and president of the Automobile Manufacturers Association, demonstrates a seat belt. Chrysler is making belts available to its dealers at what it termed its actual cost price of \$6.35 to encourage greater use of belts. Beginning with '62 models, all five American car manufacturers will provide installation aids, which will simplify belt installations and therefore lower the cost to the car buyers.**



# Carelessness Costs Cash

**C**ARELESSNESS around the shop can cost in both doctor bills and manhours.

Most shop operators realize this, yet every day they allow conditions to exist which not only cause accidents but actually promote them.

The opposite page lists some "case histories" of how carelessness causes accidents and how expensive they can be. (Note: These accidents took place during the course of one year in a large shop before safety rules and regulations were put into effect and were rigidly enforced.)

These are but a few of the case histories which happened during that period — all because safety standards had not been set up and enforced.

Mr. Foreman, why not take a look at your shop and make a note of the number of violations of just the most simple rules of safety? We become so accustomed to such violations that

**By E. M. LOWERY**

Technical Editor

Ed Lowery should know what he's writing about. As director of service at Lander Motors, Inc. (Dodge-Simca), Atlanta, he supervises scores of employes, causing him long ago to become safety-minded in shop operations.

we soon take them for granted.

For instance, how many of your electric power hand tools are properly grounded? Do all of your men use goggles when working with a power grinder or a wire brush buffing wheel?

Do your men use adequate care when using welding equipment or handling gasoline?

What about fire extinguishers? Do you have enough for proper protec-

tion? Are they always charged, easy to reach and always in their proper place?

Do you allow oil or grease to remain on the shop floor?

If you don't have the right answer for these questions, then you are inviting trouble.

Here are some safety tips that should apply to any shop:

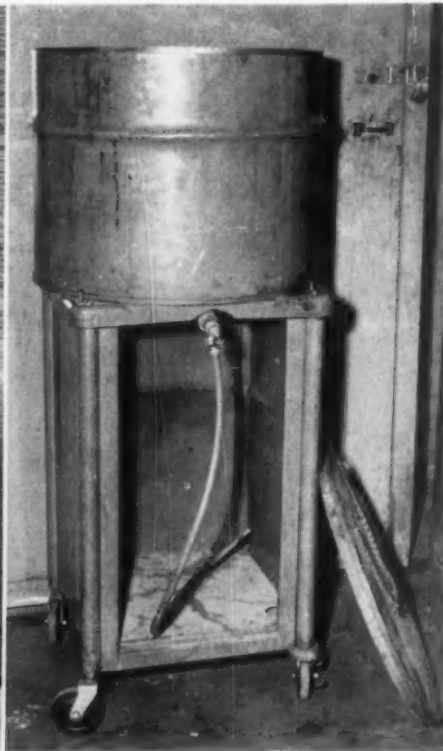
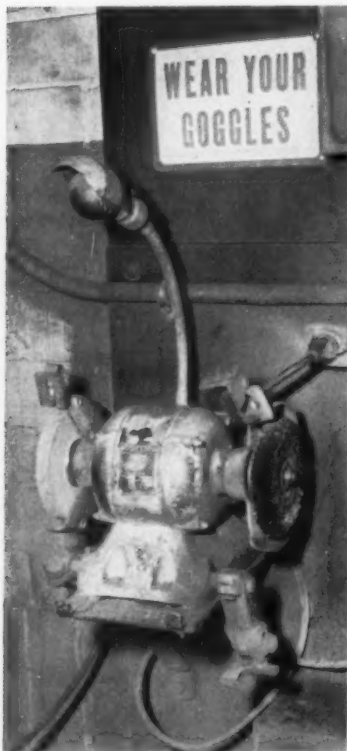
**Floors, ramps and stairs:**

Be sure there is sufficient lighting in areas where there is not natural light.

In spite of all efforts to prevent it, oil and grease will drop on the floor at times. This has been the cause of many injuries, therefore it should be cleaned up as promptly as possible. If for any reason it can't be cleaned up immediately, it should be covered with an oil or grease absorbent. Not only will this reduce the hazard, but it will prevent its being tracked to other areas.

The only thing right about the photo at left below is the sign! There are no shields on the bench grinder and no goggles are available nearby. This is a fine way to encourage eye injuries. They say there should be a place for everything and certainly the fire extinguisher should be in its place (red spot showing up as black in center photo).

It's too late to search for one after the fire starts. At right is a home-made container for handling gasoline. Note the fiber casters which will cause no spark as they are moved over a concrete floor. Gasoline should always be kept in a closed container (note the tap on the floor at the right). Small oversights can far too often lead to terrific losses.



## TRUE CASE HISTORIES OF SHOP ACCIDENTS

Description of Accident	Paid	Description of Accident	Paid
Employee was wearing open top shoe, dropped chemical on foot and blistered foot .....	\$ 47.50	Employee was removing side of wrecked car, part of body fell on arm, cut right arm ...	\$ 13.00
Employee stepped on creeper and fell on left elbow .....	61.67	Employee hit cold chisel and a piece of steel glanced off and hit on left side of face ....	10.00
Employee was driving kingpins out of spindle on car, hit index finger on left hand .....	56.17	Employee was moving motor block and dropped it on right foot .....	26.91
Employee assisting in tearing down scaffold, part of it fell and in trying to get out of the way he tripped and fell, caught himself on left hand, bending fingers back .....	17.00	Employee was grinding off fender and pieces of metal got in both eyes .....	10.00
Employee was putting motor in frame, frame slipped and hit knee against motor .....	28.00	Employee was grinding fender, steel got in right eye .....	6.75
Employee was grinding a part on emery wheel and got foreign matter in eye .....	5.00	Employee working on truck and was injured..	308.25
Employee slipped on floor and bruised knee..	19.50	Employee was unloading boxes, one fell on left ankle .....	16.50
Employee was taking transmission out of vat when he slipped and fell, dropping transmission on top of him .....	19.50	Employee was using acid to clean metal on cars and had breaking out on arms, legs and body .....	12.00
Employee was working on wheel bearings, wrench slipped and his head hit brake drum .....	13.00	Employee was taking mileage reading off truck after it had been placed on lift, lift started up without employee realizing it had moved and when he stepped back he fell several feet .....	140.33
Employee was changing oil filter, wire cut left hand and index finger .....	11.00	Employee picked up a grille panel package. His fingers slipped through the grille, cutting his third finger on right hand .....	13.00
Employee was hammering out a fender, hammer glanced off and hit employee on upper lip .....	38.60	Employee was walking across floor, slipped on oil and fell, sprained back .....	80.93
Employee was walking down service ramp, slipped and fell, sprained back .....	118.25	Employee was pulling weights off wheels, pliers slipped and caught finger, bruised it .....	21.00
Employee was cleaning post on battery and got battery acid in right eye .....	12.75	Employee was using brake machine, pliers slipped and thumb went into wheel .....	15.00
Employee's right thumb was caught between tailgate and truck .....	16.00	Employee was welding, piece of steel flew off and went into left eye .....	8.00
Employee was looking into the engine of a cab-over-engine truck, the hood fell off and hit left foot .....	14.50	Employee was grinding on fender, small piece of steel flew off into eye .....	6.75
Working on lathe, steel dust in left eye ....	17.00	Employee was using grinder and got piece of steel in left eye .....	9.75
Employee was working on drive shaft of car, shaft fell off on left hand .....	14.50	Employee was working in unit repair, another person pushed a motor and injured employee's fingers .....	13.00
Employee was taking off tire, lug wrench slipped and cut leaders on back of right hand .....	142.66	Employee slipped on floor and fell, cut head, stitches required .....	13.00
Employee working in service department, got foreign particle in left eye .....	5.00	Employee was grinding fender, preparing car for painting. Piece of steel went into eye ..	15.75
Employee was tightening steering on auto, wrench slipped and bruised left hand ....	24.00	Employee was working on car and got foreign object in right eye .....	5.00
Employee was helping to load cars on a transport and sprained lower right chest .....	479.10	Installing clutch in car. Wrench slipped and hit employee over left eye .....	12.00

These are true case histories of accidents involving employees. How many have bobbed up in your own shop's operations?

Creepers and tools should be kept off the floor when not in use. Welding equipment hoses should never be left on the floor as they may be damaged by a moving vehicle or a falling object, thus starting a fire.

### Power tools:

Today's safety regulations require the proper grounding of all electric power tools. We never know when the electric tool which "bites" occasionally may cause a serious shock.

Shields should be on all bench grinders.

Goggles should be available and employees should be made to wear them. Foreign object in the eye is one of the most common minor injuries.

### Fire prevention:

The shop should be equipped with a sufficient number of fire extinguishers and sand buckets. Extinguisher location should be properly

marked for identification so that employees will know where extinguisher is in case of an emergency. And by all means, keep the extinguisher in place. It may be too late to start looking once a fire begins.

### Handling gasoline:

Many serious injuries and fires have resulted from the careless handling of gasoline.

Very seldom does a day pass that  
(Continued on page 88)



# Vehicle Safety Is Your Business

**Y**ou can provide a service to your regular customers, build your parts and service business and strengthen your reputation as a public-spirited businessman by taking an active part in the 1961 National Vehicle Safety-Check program during May and June.

Thousands of automobile, tire and petroleum dealers and independent garagemen have taken advantage of this nationwide vehicle safety campaign in recent years. They have found Vehicle Safety-Check participation to be a sound business builder, as well as an activity that provides lasting dividends in community good-will and personal satisfaction.

Last year more than three million cars received a ten-point check for safe driving condition in states not requiring periodic motor vehicle inspection. One out of six was found to need immediate service attention to at least one of the ten items checked.

The ten items Safety-Checked which affect safe driving condition are brakes, front and rear lights,

**By M. R. DARLINGTON, JR.**

Managing Director  
Auto Industries Highway Safety  
Committee  
Washington, D.C.



Editor's note: The author has long been identified with movements to increase your chances of survival on streets and highways and has appeared on many programs at automotive conventions over the South.

steering, tires, exhaust system, glass, rear view mirror, windshield wipers and horn. Results of the 1960 National Vehicle Safety-Check showed that the item most frequently needing service attention was rear lights, followed in order by front lights, brakes, exhaust systems and tires.

Vehicle Safety-Checks can be conducted either in places of business or at community check lanes open to the motoring public on city streets.

The voluntary nature of the Vehicle Safety-Check program makes it a popular traffic safety activity with motorists who appreciate being given a chance to check the condition of their cars free of charge. In addition, your participation in a community Vehicle Safety-Check program will probably entail cooperation with public officials, leading civic, safety and service organizations. Your association with such community groups, in a cooperative program of traffic accident prevention, is a positive public relations activity.

The National Vehicle Safety-Check program is sponsored annually by the Auto Industries Highway Safety Committee and *Look Magazine*, with the cooperation of the Association of State and Provincial Safety Coordinators. It is conducted primarily in states not requiring periodic motor vehicle inspection. Its objective is to raise the general operating condition of vehicles on America's streets and highways, as part of a balanced action program of traffic accident prevention.

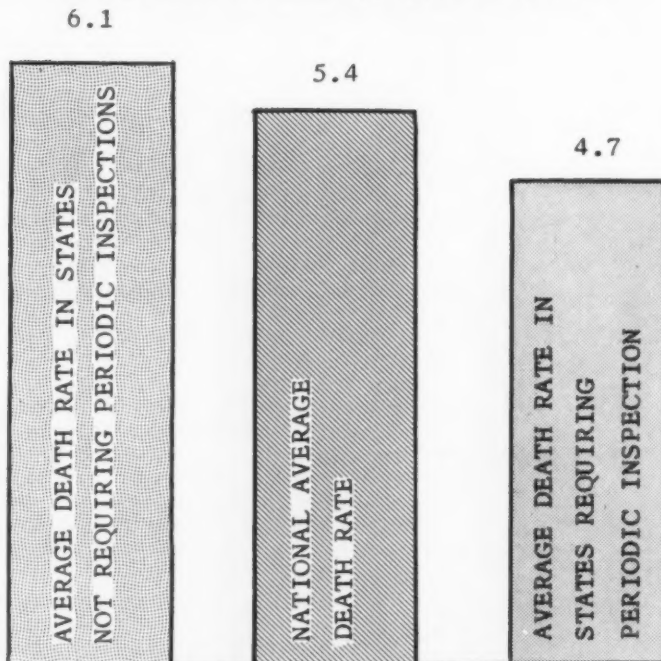
How many traffic accidents are caused by unsafe vehicles is not known. However, the U. S. Commerce Department's Bureau of Public Roads has stated that facts revealed in their recent study, "The Federal Role in Highway Safety," suggest that vehicle condition plays a more important part in traffic accidents than has been previously believed. There are five important reasons why unsafe vehicle condition has not been given proper recognition as a cause of accidents:

1.—Vehicles are often damaged beyond the point of determining condition at the time of the accident.

2.—Accident investigations tend to concentrate on the driver and driving conditions, exclusive of vehicle condition.

3.—Many investigators are not trained to recognize evidence of un-

Traffic deaths per 100,000,000 vehicle miles of travel are graphed below, based on figures for 1959. Note that states without vehicle inspections averaged 6.1—13% above the national average of 5.4 and 30% above the 4.7 average death rate in states requiring periodic inspections.





safe vehicle condition.

4.—Accident reporting procedures in different states are not uniform.

5.—Drivers are reluctant to admit maintenance neglect, fearing prosecution for contributory negligence.

In states requiring periodic inspection, as many as half of the vehicles presented for inspection are rejected because they require service attention. In a voluntary program, such as the National Vehicle Safety-Check, many cars obviously in unsafe condition often are never brought to the check lanes. That's why the program needs the active support and participation of all interested elements in the community.

In many areas, the success or failure of a community program is determined by the cooperation and support rendered by local automotive businessmen. They hold the key to the success of a community campaign from which they have everything to gain.

#### Stressing Safety for Employees

Again this year special emphasis is being placed on Vehicle Safety-Check programs for employees. These activities are being actively promoted either as separate programs or in cooperation with a community effort. Employee programs offer many motorists a chance to have their vehicles Safety-Checked in areas where no community program is planned. You can assist these employee programs by acting as a "Safety-Center" for servicing and rechecking vehicles found in unsafe driving condition.

As in years past, automobile and tire manufacturers are providing twenty special field representatives to our committee to help promote the program in the non-inspection states. They include:

Arkansas and Oklahoma — W. K. West of Dodge Division.

Missouri — William Wright of Dodge Division.

Kansas—Louis E. Taylor of Chevrolet Division.

Alabama and Tennessee — Julius E. Anderson of The General Tire & Rubber Co.

Maryland—Paul W. Barnard of The B. F. Goodrich Co.

North and South Carolina — Charles B. Rudder of The Goodyear Tire & Rubber Co.

Kentucky—John J. McCarthy of Studebaker-Packard Corp.

Florida and Georgia—Rudolf Ruyll of U. S. Rubber Co.

Here is a list of things you can do to take an active part in the 1961 Vehicle Safety-Check program:

1.—Find out if your community plans to conduct a local Vehicle



A wide variety of promotional material, as shown here, is available to help you promote safety-checking of cars next month, including colorful window trims, "safe driving tips" pamphlets and windshield stickers.

Safety-Check program.

2.—Contact public officials, key civic leaders or other interested individuals and offer your help in organizing a community-wide Vehicle Safety-Check.

3.—Identify your place of business with the community effort by displaying program promotional materials.

4.—Help your community obtain materials for use at check lanes.

5.—Lend mechanics or other personnel to work at community check lanes to demonstrate your endorsement and support of the activity.

6.—Use the "Circle of Safety" theme in your regular advertising. Plan cooperative Vehicle Safety-Check advertising with other local businessmen.

7.—Offer merchandise or service prizes for community contests or drawings.

8.—Offer free Vehicle Safety-Checks at your place of business; also, be a "Safety Center" for re-

checking vehicles.

9.—Offer Safety-Check "Specials" during May and June and periodically throughout the year.

With just a little effort, you can make your community a safer place to live. You can build your parts and service business and public good-will at the same time.

The Auto Industries Highway Safety Committee is national headquarters for the National Vehicle Safety-Check program. "How-to-do-it" planning materials are provided to participating communities. Special banners, window displays, outdoor posters, handout leaflets and other promotional materials are available for purchase by dealers and communities.

For additional information about how you can participate, write to the Auto Industries Highway Safety Committee, 2000 K Street, N. W., Washington 6, D. C.

Remember, Vehicle Safety is Your Business!

# Troubleshooting Guides for

**W**HEN any of the numerous accessory controls which usually are mounted on the instrument panel are turned on and nothing happens, the driver may be in trouble.

It was just a few days ago that an owner of one of the foreign compacts remarked that he was forced to spend the night in a town only about 50 miles from his home because the windshield wiper would not operate, and he could not see well enough to drive due to the continuous rain.

The following diagnosis guides list many of the sources of trouble in the various electrical and accessory systems and they should aid in reducing troubleshooting time:

## **Windshield wiper (electric):**

1.—Wiper operates slowly.

Possible causes:

(1) High resistance in brush to commutator contact or carbon deposits in slots. Check armature commutator and brushes.

(2) High resistance in ground connection. Check for high resistance in ground connection and/or wiring circuit.

(3) Defective control switch.

2.—Wiper fails to operate.

Possible causes:

(1) Binding linkage.

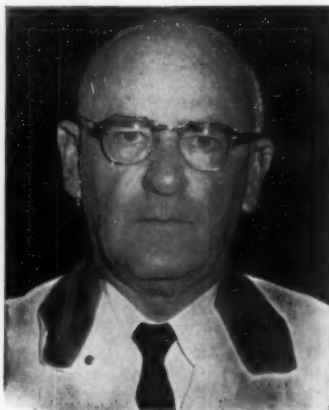
(2) Defective switch. Test for defective switch by connecting a jumper wire from the ammeter

terminal post to the windshield wiper motor terminal (A) on switch.

(3) Defective motor.

(4) Open or grounded wiring.

3.—Wiper blades not parking off glass (variable speed).



**By E. M. LOWERY**

**Technical Editor**

Possible causes:

(1) Broken link spring.

(2) Link spring not releasing.

(3) Link spring not engaging stop on linkage.

4.—Wiper blades will not park off glass.

## **Windshield Wiper Lights Horn Instrument Panel Gauges Turn Indicator Radio Heater Air Conditioning**

Possible causes:

(1) Parking switch out of adjustment.

5.—Blades slap windshield moldings.

Possible causes:

(1) Improperly installed link spring trip.

(2) Alignment of motor and pivots.

6.—Blades chatter.

Possible causes:

(1) Twisted arm. Do not attempt to straighten bent or twisted arm.

(2) Wrong type of blades used.

(3) Wax on glass.

7.—Motor will not park.

Possible causes:

(1) Follower pin in parking switch plate may be too short.

(2) Parking spring in parking switch plate is bent too low and is not breaking contact.

(3) Contact spring leaf on parking switch plate is distorted, caus-

**A good wiper blade has an important job to do.**



ing excessive tension and not breaking contact.

(4) Dirty or worn contact points.

**Light trouble diagnosis guide:**

All headlights do not light:

- 1.—Loose battery cable.
- 2.—Loose or broken wire from the battery to the headlight switch.
- 3.—Defective headlight switch.
- 4.—Disconnected or broken wire from the headlight switch to the beam selector switch.
- 5.—Defective beam selector switch.
- 6.—All headlight bulbs burned-out. This may be caused by a defective or improperly adjusted generator voltage regulator.

Individual lights do not light:

- 1.—Burned-out bulb.
- 2.—Loose or broken wires to the bulb.
- 3.—Poor ground.

Lights burn out repeatedly:

- 1.—Loose or corroded electrical connections.
- 2.—Excessive vibration.
- 3.—Improperly adjusted or defective generator voltage regulator.

**Troubleshooting the Horn**

**Horn trouble diagnosis guide:**

Horns do not sound:

- 1.—Loose connections at horn button contact.
- 2.—Open wire to horn button.
- 3.—Open wire to horn relay.
- 4.—Inoperative relay.
- 5.—Horns defective or out of adjustment.

One horn fails to operate:

- 1.—Broken or loose wire to the horn.
- 2.—Horn defective or out of adjustment.

Horns operate continuously:

- 1.—Shorted wire to horn button.
- 2.—Shorted relay.

**Instrument trouble diagnosis guide:**

Oil pressure indicator light inoperative:

- 1.—Indicator bulb burned out.
- 2.—Loose or broken wire from the light to the indicator switch.
- 3.—Defective oil pressure indicator switch.

Charge indicator light inoperative:

- 1.—Burned-out bulb.
- 2.—Loose or broken wires to the armature terminal of the voltage regulator and/or generator.
- 3.—Generator armature not grounded.
- 4.—Generator regulator malfunction.

Fuel gauge erratic or inoperative:

- 1.—Loose or broken wire from the constant voltage regulator to the fuel gauge.



This will be a far safer car after these men finish aiming the headlights and adjusting the windshield wiper arms and blades—both so highly necessary for good driver vision.

- 2.—Defective fuel gauge
- 3.—Loose or broken wire from fuel gauge to the fuel tank sending unit.
- 4.—Defective constant voltage regulator.

5.—Defective fuel tank sending unit.

6.—Poor ground between fuel tank and body.

Temperature gauge erratic or inoperative:

1.—Loose or broken wire from constant voltage regulator to the temperature gauge.

2.—Defective temperature gauge.

3.—Loose or broken wire from the temperature sending unit to the temperature gauge.

4.—Defective temperature sending unit.

Both fuel and temperature gauges erratic:

1.—Loose or corroded constant voltage regulator ground.

2.—Defective constant voltage regulator.

3.—Broken or loose wire from or to the constant voltage regulator.

4.—Defective ignition switch.

**Turn indicator diagnosis guide:**

Turn indicator lights inoperative:

- 1.—Burned-out fuse.
- 2.—Loose or broken wire from ignition switch to flasher.
- 3.—Defective flasher.
- 4.—Loose or broken wire from flasher to turn indicator switch.
- 5.—Defective turn indicator switch.

6.—Broken or loose wires from switch to lights.

7.—Burned-out bulbs or loose sockets.

Turn indicator lights operate incorrectly:

1.—Loose or broken wires from switch to light.

2.—Defective indicator switch.

3.—Defective flasher.

Turn indicator cancels improperly:

1.—Cam improperly positioned on steering wheel hub.

2.—Coil spring on switch plate assembly loose or weak.

**Radio trouble diagnosis guide:**

No reception:

1.—Burned-out fuse.

2.—Defective antenna.

3.—Shorted speaker lead or defective speaker.

4.—Reversed battery polarity.

5.—Burned-out tubes.

If all tubes do not light up, make certain that voltage is available at the "A" lead (12 volts). If some tubes light up, replace those that do not light.

6.—If the radio still will not operate, substitute the known quality test tubes for those in the receiver, one at a time, allowing enough time for each tube to heat up before going on to the next tube.

Be sure to turn off the radio receiver before removing or installing the speaker or any radio tube.

If the radio still will not play, remove the receiver for a major



Failure of any unit represented in the light and accessory control center can quickly spell trouble for the driver.

repair.

Noisy or erratic reception:

Noisy reception—engine not running:

1.—Loose connections.

2.—Defective radio tubes.

Noisy reception—engine running:

1.—Defective suppression equipment.

2.—Suppression condensers not properly grounded.

3.—Receiver not properly grounded to instrument panel.

Noisy reception—car in motion:

1.—Loose or broken lead-in cable.

2.—Loose or defective radio antenna.

3.—Defective wheel static collector.

Distorted or garbled sound:

1.—Voice coil rubbing on center pole piece of speaker magnet.

2.—Torn speaker cone.

3.—Foreign material on cone.

4.—Bent or twisted speaker mounting.

5.—Defective radio tube.

Be sure to turn off the radio receiver before removing or installing the speaker or any radio tube.

Weak reception:

1.—Poor adjustment of the antenna trimmer (rear mounted antenna only).

2.—Defective radio tube.

**Heater trouble diagnosis guide:**

Insufficient or no heat:

1.—Burned-out fuse or loose wires to the heater blower.

2.—Defective motor ground.

3.—Fan loose on motor shaft or motor stalled.

4.—Defective heater blower switch.

5.—Defective blower motor.

6.—A closed engine block shut off valve to the heater hoses (recirculating heater only).

7.—A kinked, clogged or collapsed water hose.

8.—Improperly connected heater hoses.

9.—Plugged heater core.

10.—Improperly installed or defective engine thermostat.

11.—Incorrectly installed and adjusted control cables.

12.—Defective water valve.

13.—Air leaks in the ventilation system.

Insufficient or no defrosting:

1.—Improperly adjusted defroster control cable.

2.—Disconnected defroster hose.

3.—Binding defroster valve.

4.—Plugged or loose defroster nozzle.

5.—Obstructed defroster openings at windshield.

Too much heat:

Check for an incorrectly adjusted or malfunctioning water valve.

**Air-conditioning trouble diagnosis guide:**

Symptoms and diagnosis steps:

Drafts:

a. Poor air distribution.

Readjust air outlets.

b. Car temperature too low.

Check hot gas valve or thermostatic switch.

Check control panel linkage.

Shortage of air supply at outlets:

a. Car temperature up.

Check position of air dampers.

Check fan speeds.

Check cooling coil for air passage.

b. Low fan speed.

Check voltage at fan motor.

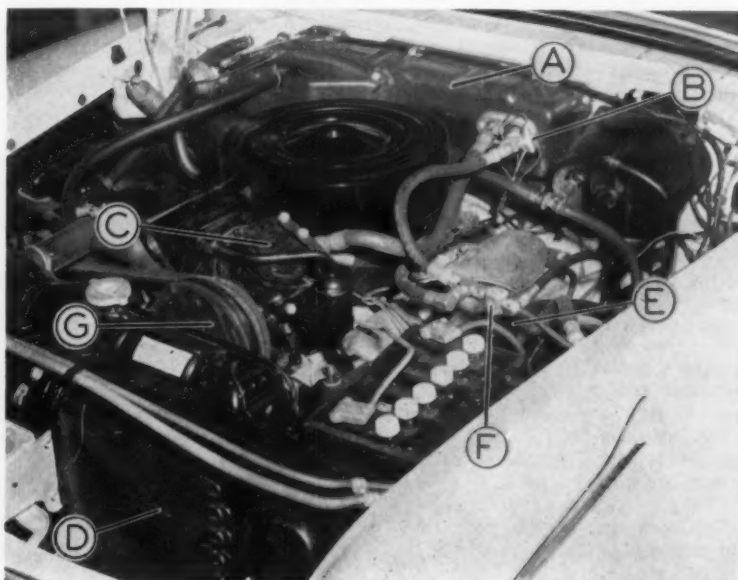
Check motor bearings.

Check direction of motor rotation

Air noise:

a. Sharp obstruction in air stream.

Air conditioning requires service and can give trouble. Now's the time to get 'em ready for the hot months just ahead. This shows typical location of various units: A—evaporator, mounted behind housing inside car; B—expansion valve; C—compressor; D—condenser; E—receiver unit; F—sight glass; G—magnetic clutch.





## May: Water Pump Service

With warmer weather knocking on our door, the cooling system is in for higher temperatures. That's why water pump service will be Ed Lowery's timely topic.

Check internal surfaces of ducts and smooth out kinks or rough edges.

b. Small slits in ducts.

Check ducts and close all holes or openings.

c. Obstruction in outlets or ducts.

Check for partly covered outlets, loose materials in ducts or fan housing and loose dampers in ducts.

Scraping noise:

a. Fan hitting fan housing.

Adjust fan to turn free on all sides.

Check motor bearings.

Tighten motor mountings.

Rattle and vibration noises:

a. Loose ducts, tubing or compressor mounting. Check duct, tubing, tubing clamps, compressor and compressor mounting for looseness and tighten where required.

b. Cooling coil mounting bolts loose. Tighten or install new bolts.

Water leaking or dripping into passenger compartment:

a. Drain tube stopped up.

Clean drain tube.

b. Drain tube disconnected.

Connect drain tube.

Hissing noise at expansion valve:

a. Shortage of refrigerant (indicated at sight glass).

Locate and repair leak and add refrigerant.

b. Restriction in liquid line.

Check receiver-dehydrator for partial stoppage.

Check line for kinks.

Check filter screen at expansion valve.

Partial frosting and sweating of cooling unit or poor cooling:

a. Improperly installed or adjusted controls.

Check all controls for proper installation and adjustment, particularly linkage to hot gas valve and heater control valve.

b. Shortage of refrigerant (indicated at sight glass).

Locate and repair leak and add refrigerant.

c. Restricted or clogged liquid line.

Check receiver-dehydrator for partial stoppage.

Check line for kinks.

d. Hot gas valve out of adjustment or malfunctioning. Adjust or replace hot gas valve.

e. Thermostatic switch improperly adjusted or relay malfunctioning.

Adjust thermostatic switch or check relay.

f. Expansion valve malfunctioning.

Replace expansion valve.

g. Clutch will not disengage.

Check clutch.

Failure to cool:

a. Faulty hot gas valve operation.

Check linkage from control panel to hot gas valve for proper installation and adjustment.

Check hot gas valve adjustment and adjust setting if necessary.

b. Faulty thermostatic switch or relay operation.

Replace faulty component.

c. Faulty clutch operation.

Check clutch actuating coil connections and coil.

Check clutch for slippage by watching bolt in center of compressor shaft. Bolt should be turning at same speed as pulley.

Check for belt slippage.

Check air gap, which should be .035" to .045".

Remove and check internal parts of clutch and replace where necessary.

Check and adjust all shims as required.

d. Lost refrigerant charge (complete charge).

Locate and repair leak, process and charge system and check for proper oil level.

e. Blower not operating properly.

Check electrical circuit.

Check motor and fan.

f. Insufficient air.

Check motor speed.

Check for restrictions in ducts.

Check for dirty evaporator coils. Remove coil to clean as necessary.

g. Stopped up liquid line or receiver dehydrator.

Check for stoppage and replace if necessary.

h. Faulty expansion valve.

Expansion valve malfunctioning. Replace valve as required.

Discharged power element. Replace valve.

Stopped up expansion valve filter screen. If screen cannot be cleaned, the valve must be replaced.

Intermittent failure to cool:

a. Freeze-up in high humidity areas.

Raise low limit of hot gas valves or thermostatic switch.

b. Expansion valve loss of bulb charge.

Replace expansion valve.

Too cool:

a. Faulty hot gas valve or thermostatic switch.

Check control panel linkage to valve and adjust if necessary.

Repair or replace unit as necessary.

## Removing Camshaft Plug On Plymouth Engine

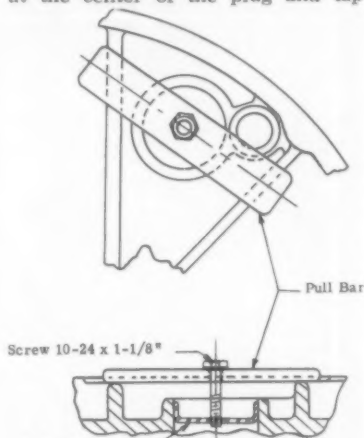
PLYMOUTH Division has issued this service bulletin:

When removing the steel core plug at the rear of the camshaft in an aluminum engine, caution must be observed to avoid damage to the core plug opening in the aluminum cylinder block. The following removal procedure is recommended:

1.—Remove transmission and fly-wheel or converter.

2.—Remove clutch housing (manual transmission car).

3.—With a sharp punch, approximately 1/8" diameter, punch a hole at the center of the plug and tap

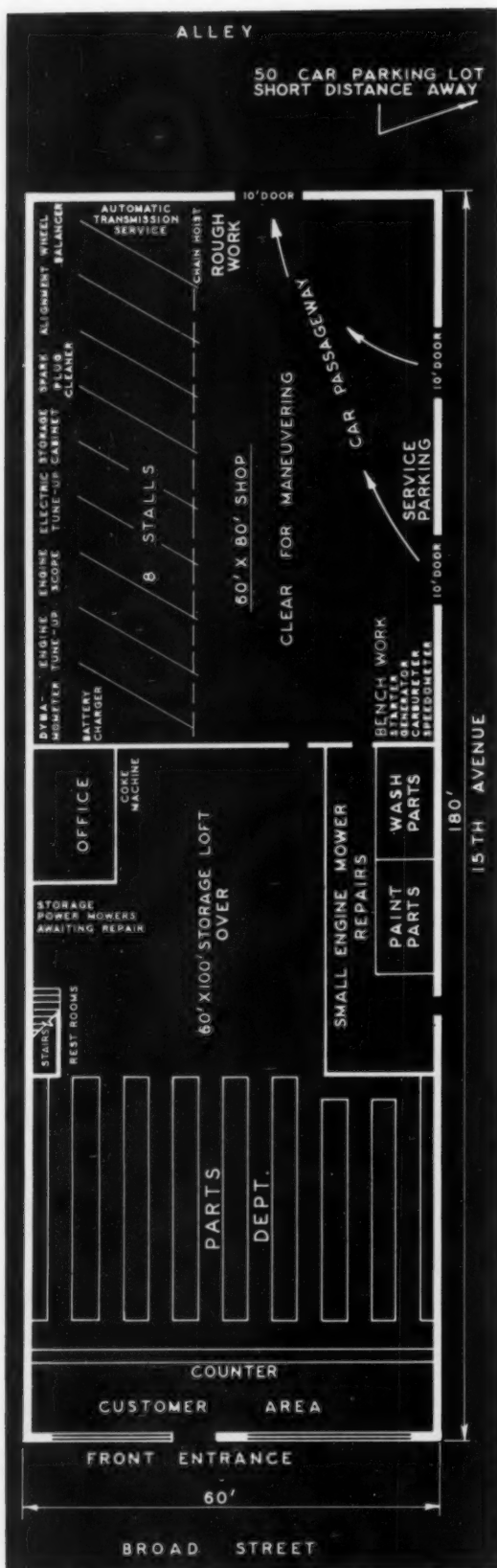


the hole with a 10/24 tap. (Do not drill hole because of chips. Also, more holding threads will result with punched hole.)

4.—Drill a 1/4"-diameter hole in the center of a piece of 1/4 x 6" steel and place it across the two supports which are located one on each side of the plug.

5.—Insert a screw 10/24 x 1 1/8" through the hole in the steel plate and screw it into the tapped hole in the plug. Continuing to turn the screw will pull the plug without damage to the bore. (See sketch.)

6.—Make sure all foreign material is removed from bore before installing the new plug.



# Good Location— and Elbow Room

By ROSS L. HOLMAN

A GOOD LOCATION and enough elbow room. Those are the two chief advantages of which Ollie M. Moore Garage can boast at Nashville, Tennessee.

Now owned and operated by W. S. Vorhees, the garage sits on the edge of Nashville's busiest downtown traffic. It fronts on Broad Street, the heaviest traveled thoroughfare into the heart of the city's business section. Thousands of cars pass here each day and the garage is situated where the cars are slowed down by the heavy traffic movement. In passing, the motorists have ample opportunity to read the sign over the entrance listing in box-car letters the services offered to motorists.

The building has plenty of inside service area in which to receive cars and give them what it takes.

The shop part itself has a floor space 60' by 80'. The mechanics are never crowded in this area.

As the diagram shows, practically all servicing equipment is on the left side of shop facing toward the back.

There are two car entrances from the 15th Avenue side and an exit door at the rear end. This provides a clear passageway in and out. This convenience, within itself, saves both working force and car owners a lot of trouble in twisting, backing and gearshifting to get in and out of what might otherwise be a congested working area, such as is found in many shops.

A few cars awaiting service are parked inside the shop on the 15th Avenue side while other cars are being serviced on the equipment side. But the inside parking area isn't sufficient within itself to accommodate all the vehicles awaiting their turn.

"We have a 50-car parking lot just around the corner to handle our overflow," said W. E. Whittenburg, shop foreman. "We have from one to two delivery boys who feed the cars in and out as we need them and they handle a few other jobs in connection with them."

One cannot help but be impressed by the ample, uncongested room in which the servicemen have to work. On the equipment side are eight car stalls. They are served by specialized mechanics and machines. They include one specialist for carburetors, one for ignition and electrical work, two for generator and starter, one for front-end alignment, one for automatic transmission and engine overhaul.

Two other specialists work in the small-engine department adjoining the shop.

The company gets quite a bit of work servicing and repairing motors of power mowers and some other machines.

The ample width allows plenty of maneuvering room be-

## Another in Garage Series

This is another in the popular series of features, with blueprints, on shop buildings proven by actual use to be efficient on the shape lot which they occupy.

tween the two sides for cars shifting from one service area to another, or to the outside. The rear end of the shop adjoins an alley into which is provided a ten-foot door. The three in-and-out doors, including the two on the 15th Avenue side, are almost a sure guarantee of a clear passageway from entrance to exit, regardless of how heavy the shop run is.

On the servicing side are some of the most efficient and up-to-date machines available for the type of work on which the garage specializes. They include a battery charger, dynamometer, engine tune-up machine, an electric tune-up machine, front-end device, wheel balancer and automatic transmission service. In the shop also are a chain hoist and other servicing equipment.

All the rough car work is done in the rear, making it easier to keep the broad cement floor free of rubbish. In addition to its other qualities, the cleanliness of the shop floor impresses all car owners, especially the lady customers.

There are two small partitioned-off work areas on the right side of building as shown by the diagram. One is used for bench work and the other for small engine and mower repairs.

Vorhees keeps a full line of parts for all his service work. They are well classified in rows of bins near the front.

With a 10,800-square-foot ground floor area one might be led to think the company would have all the elbow room it needs. But, in addition to the floor space shown in the diagram, the building has a 60' by 100'



There's obviously room for equipment and men in this shop!

loft reached by a stairway. This loft is used for all general storage. The ground floor is reserved entirely for shop work and for an uncrowded display area.

Vorhees insists on plenty of room to set up the kind of attractive displays that will win friends and influence customers.

The entire building from front to rear is well lighted by suspended fluorescents. There is no work or display area in which one's vision is in the least strained to see what

he is doing.

During cold weather the building is comfortably heated with overhead gas heaters. The management believes nothing can come nearer keeping contented workers contented than comfortable, well-illuminated surroundings. And they add a lot to customer appeal.

Nashville has been recognized as one city where many fine garages are operating. In contrast to some cities over the South where only a few up-to-date independent shops are to be found, this municipality has more than a score of modern shops well equipped to service growingly complex automotive vehicles.

The garagemen have been highly active in the Independent Garage Owners of Tennessee, having banded together to promote their own businesses as well as the best interests of the service trade.

One reason why so many fine shops are situated in Tennessee's capital might be attributed to the fact that it's a cultural center and one well known as the center of several big religious denominations. Highly skilled labor also headquarters there, including thousands of persons engaged in the complex printing and publishing business.

Obviously such car owners are above the average in discriminating tastes and could be expected to be critical of any second-rate operations on their cars. Well-equipped and well-staffed garages have thus resulted.

The garage includes the two-story part of the building in front and the one-story shop in the rear. Entrance to shop is through the doors leading off the side street shown at right in the rear.



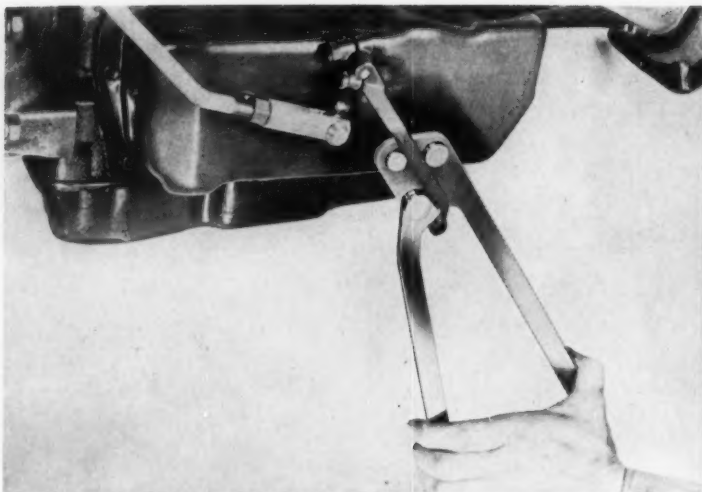


Fig. 1—Use special bending tool to position throttle arm. Special tools are essential to do the proper job.

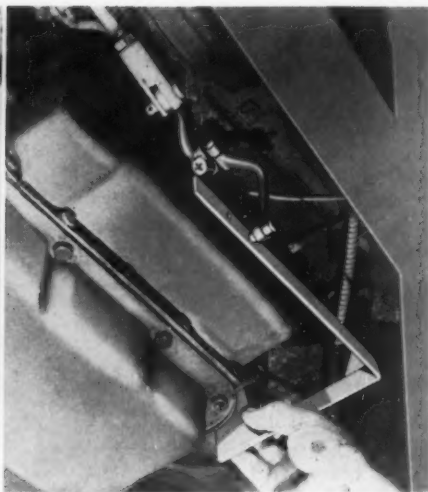


Fig. 2—Throttle arm gauge used must be for particular model indicated.

## Step-by-Step Procedure in Servicing Hydra-Matic Control Valve Assembly

WHEN the early scientists first concerned themselves with the human brain, they decided that due to the apparent convolutions and vessels, the organ must be a cooling system for the blood.

Some mechanics like to refer to the control valve assembly as the "brain" of the Hydra-Matic transmission. Anyone not aware of the

By E. S. HARRIS

function of this little hydraulic unit and the maze of channels housed in its body might guess that this unit was an oil cooler. But, as we have later discovered, both of these "brains" have a more complicated function than cooling.

The Hydra-Matic has been with us for years now, and as its torque multiplying, clutch and reversing functions have been gradually improved during its history, each change has been etched into the channels of the control valve body. Since automatic transmission servicing involves the care of some of the grandpa units as well as any of

Fig. 3—With control lever in "S" or "Lo" position, remove valve body attaching bolts.

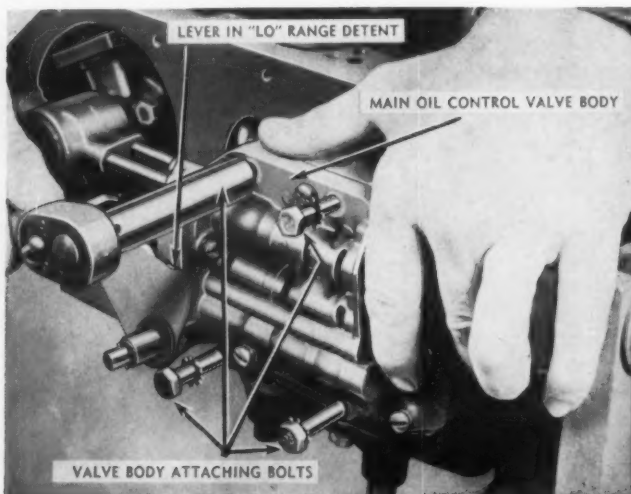
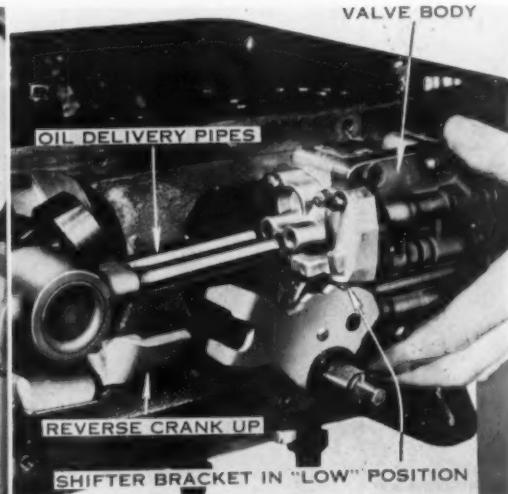


Fig. 4—Removing the Hydra-Matic valve body from the oil delivery pipes.





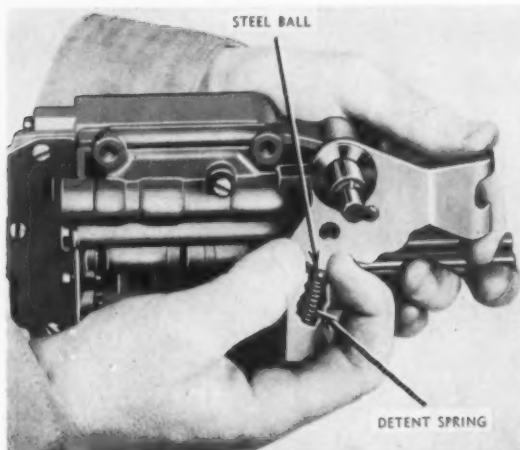


Fig. 5—Removing detent ball and spring.

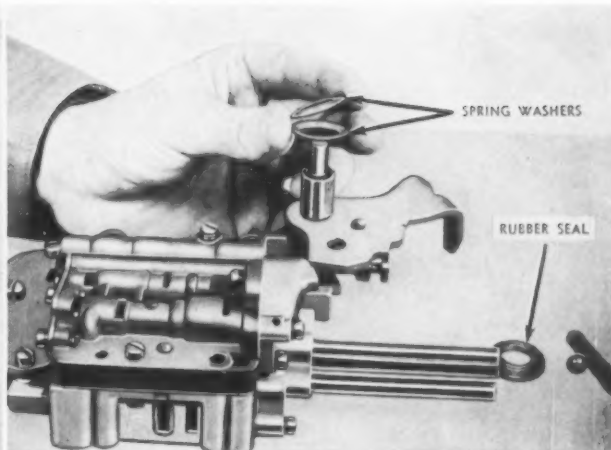


Fig. 6—Removing seal and washers from control shaft.

a number of the more modern jobs, the mechanic must know about the controls necessary to each transmission to properly service this control unit.

A routine inspection, cleaning and repair of any valve body conceivably could put it back into service without trouble, as in an overhaul, but when the complaint is such that the valve body function is suspect, it is important that the mechanic know the why and wherefore of each valve and channel so he can isolate the trouble and act on it accordingly. And this means knowing more about the operation of the automatic and manual shifts than many who work on them do.

Due to the number of shift opera-

tions involved in the several models of transmissions serviced, it is not possible to outline the complete function of each valve and channel, nor is possible to cover each individual control valve assembly, due to space limitation. But with this general outline of the basic service steps and procedures outlined in the following paragraphs, it is possible to overhaul any control valve.

The mechanic should always be on the alert for improper external adjustments or binding of the manual control and throttle control rods and arms which may be the cause of the trouble assumed to be in the control valve. Special gauges and bending tools (Figs. 1 and 2) are required to correct these linkage faults. In

these days of exchange units and rebuilt transmissions it is not unlikely you'll find the wrong model control valve installed on the transmission housing so that channels and holes do not match, causing misbehavior.

So instead of jumping to conclusions, be sure to make the routine engine condition checks, the above linkage inspections, oil level check, band adjustments and line pressure checks through the complete shift pattern before removing the control valve body.

With a true picture of the problem, then the possible faulty valves or passages in the valve body which may be involved in the trouble can be given special attention during the

Fig. 7—Removing screws holding inner and outer valve bodies together.

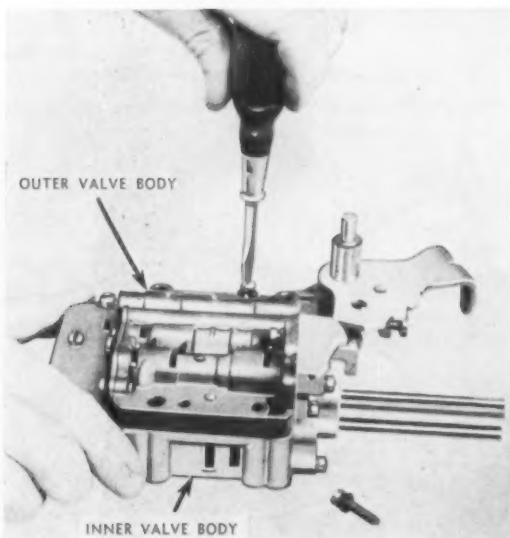
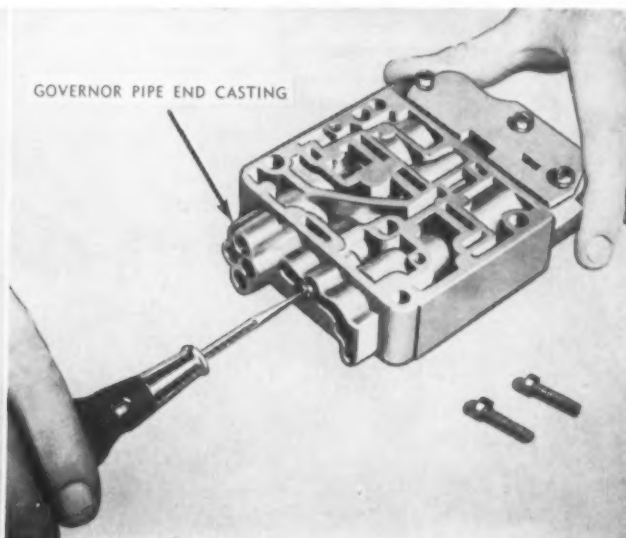


Fig. 8—Removing screws from governor end casting.



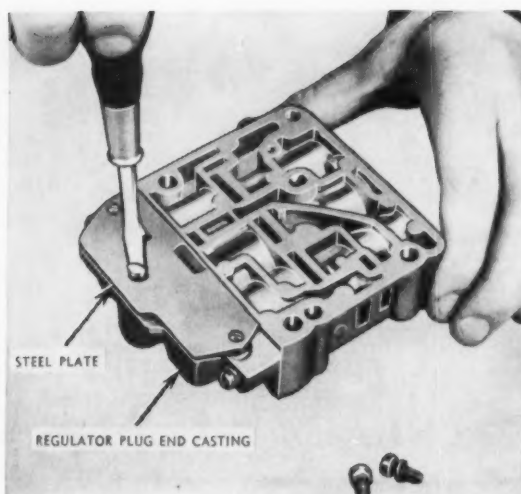


Fig. 9—Removing steel plate cover from the regulator plug end casting.

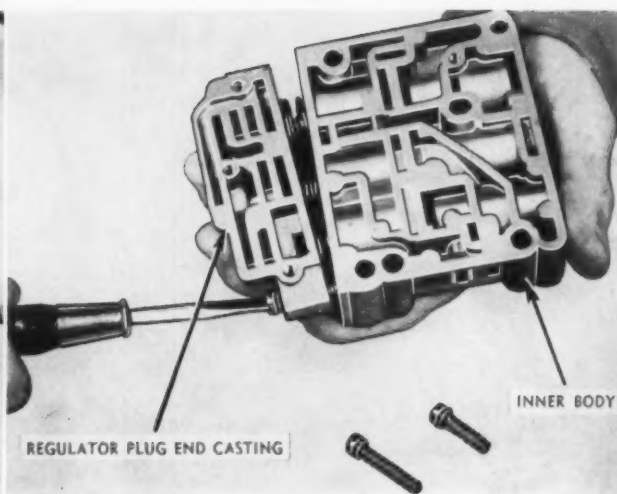


Fig. 10—Removing the regulator plug end casting.

overhaul of the assembly.

Possible troubles to be found in the control valve assembly are:

- a. Sticking valves.
  - b. Internal leakage. (Possibly due to loose screws or mating surfaces require lapping.)
  - c. Incorrect model valve assembled to transmission.
  - d. Passages not machined in control valve assembly.
  - e. Control valve improperly assembled.
  - f. Transmission case oil passages do not interconnect those of valve body or matching passages are not drilled in case.
  - g. Case oil passages interconnected to cause leakage between passages.
- Since the trouble may be due to improper assembly of the control valve unit, it is helpful if possible to obtain an assembly diagram for the particular unit because the valves and other internal parts and

their assembly differ considerably in the various models.

Since oil pressure is important through the shifting pattern, internal leakage in other units of the transmission can cause shifting malfunction, as well as leakage between channels in the transmission case itself, due to casting leaks. So the routine operating pressure test should be made, and when transmission is down the channel continuity tests with air pressure.

#### Oil leakage:

When oil leakage occurs at the side cover or control valve shaft, proceed as follows:

- a. Disconnect linkage and remove manual and throttle control levers.
- b. Drain bottom oil pan.
- c. Remove side cover bolts, copper washers and lock washers.
- d. Remove side cover and gasket. (Engine must be lowered on some vehicles.)

e. Inspect cover and gasket and neoprene seal and washers on valve control shaft. Repair or replace any parts causing leakage.

f. Reassemble, torque bolts to 10 or 12 ft. lbs.

#### Control valve assembly removal:

With linkage and control arms removed and bottom oil pan and side cover removed from case, remove control valve assembly as follows:

- a. Loosen lock nuts and back off band adjusting screws five turns.
- b. Remove pressure regulator reverse oil pipe (1951 models and up).
- c. Place detent control lever in "S" or "LO" position.
- d. Remove valve body to transmission case attaching screws (Fig. 3).
- e. Slide valve body back from oil delivery pipes (Fig. 4). (Post-1950 models include a reverse clutch pipe above delivery pipes.)

Disassembly cleaning, inspection

Fig. 11—Removing shifter valves.

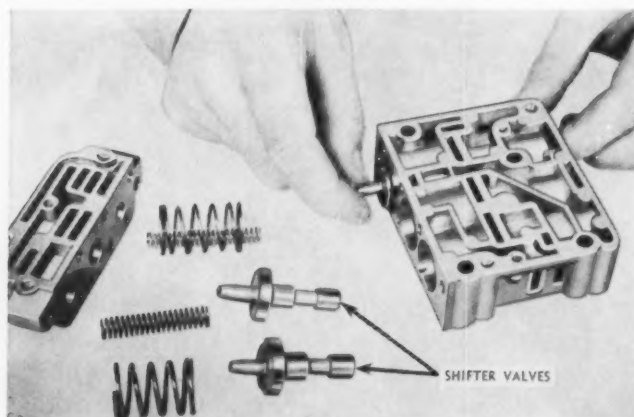
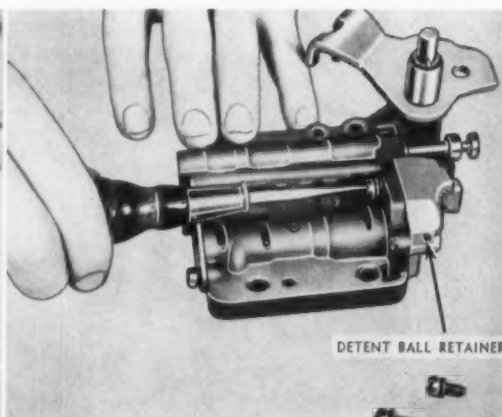


Fig. 12—Removing detent ball (or plunger) retainer.



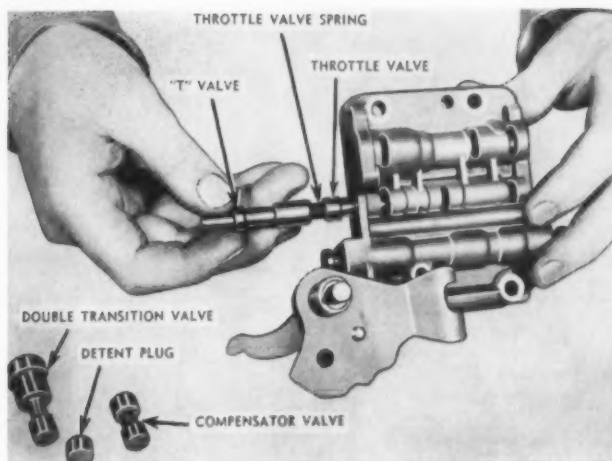


Fig. 13—Removing valves and springs.

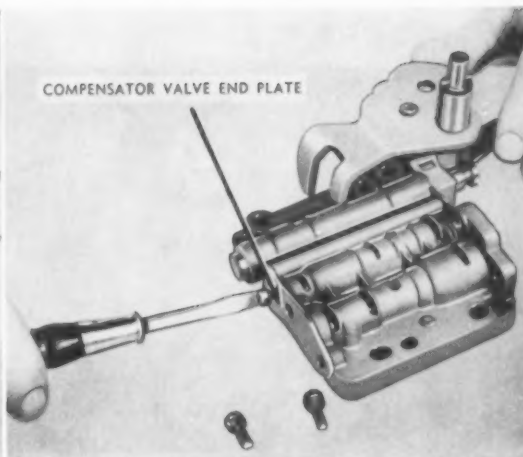


Fig. 14—Removing compensator valve end plate.

and repair of control valve assembly:

The valve body assembly must be handled with extreme care. Never grip the body in a vise or use force in removing or installing valves or plugs. Place the valve body on a paper or other clean surface for disassembly and proceed as follows:

a. Slowly move manual lever counterclockwise (Fig. 5) and remove detent steel ball (or plunger) and detent spring.

b. Remove seal and washers from the control shaft (Fig. 6).

c. Retain manual control valve (13, Fig. 17) so it remains in outer valve body until disassembly of this unit.

d. Remove screws holding inner and outer valve bodies together and remove plate separator (spacer) (Fig. 7).

e. Remove two screws from the 3-2 timing valve body (not shown)

and lift it off the inner valve body. Remove the valve retainer pin, plug, spring and valve from the timing valve body.

f. Remove three screws from governor pipe end casting (Fig. 8), casting and end plate and separate from the valve body. Remove governor plugs. On later models remove detent plug and auxiliary sleeve and valve (not shown). On later models also remove overcontrol valve spring and valve after compressing spring and lifting out retaining clip, which are located in governor pipe end castings.

g. Remove three screws securing steel plate on regulator plug end casting and remove the plate (Fig. 9). On later models remove small spring and ball from under plate and remove two screws securing detent plug retaining plate on casting. Remove 3-2 detent plug, 2-3 shift valve spring and guide pin (not shown).

h. Remove regulator plug end casting from inner body by removing three retaining screws (Fig. 10). Remove regulator plugs and shifter valves and springs (Fig. 11).

The outer valve body should now be disassembled on a second piece of paper to avoid mixing of parts with those removed from the inner valve body and its components. Proceed as follows:

a. On later models, at this time, the detent plunger retainer casting and plate are removed after removing three retaining screws. Detent ball retainer is removed from earlier models (Fig. 12).

b. Remove double transition valve, "T" valve, throttle valve and springs (Fig. 13).

c. Remove three screws and compensator valve end plate (Fig. 15). Take out the compensator valve, spring and detent plug.

d. Remove the pin holding the

Fig. 15—Removing compensator valve plug pin.

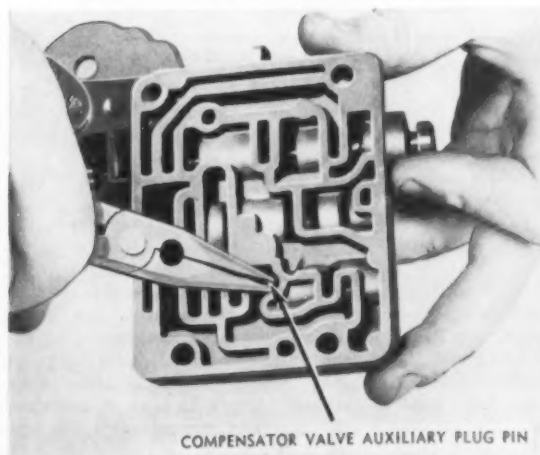
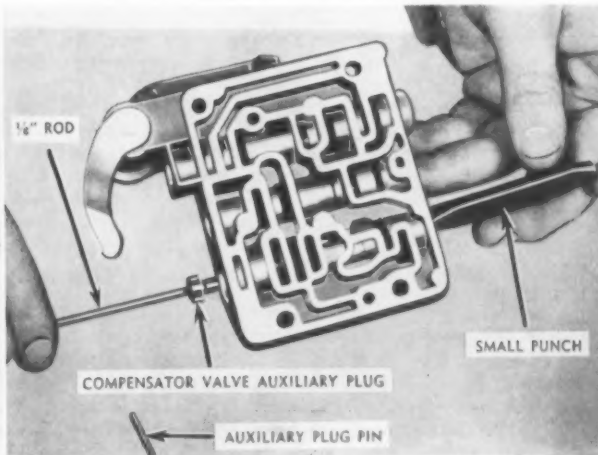


Fig. 16—Removing plug from outer valve body.



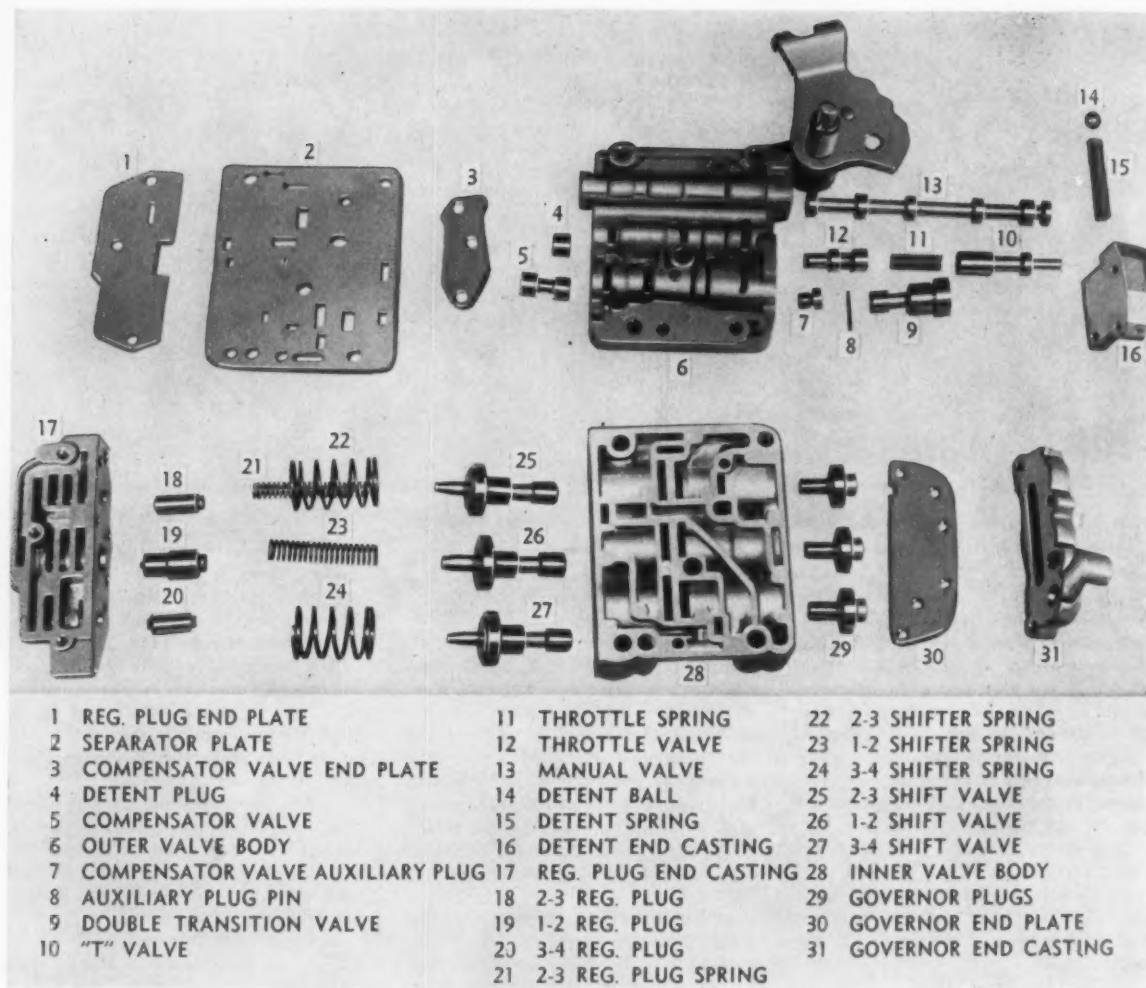


Fig. 17—Exploded view of typical control valve assembly.

compensator auxiliary plug in the outer valve body with long-nose pliers (Fig. 15).

e. Remove manual control valve.

f. Insert  $\frac{1}{8}$ " welding rod or small punch in hole in plug, and use another small punch to carefully push and guide plug from body (Fig. 16).

g. Remove spring steel bypass valve (not shown) from outer valve body channel with long-nose pliers.

With parts arranged according to groups to avoid confusion, clean separately in degreaser or cleaning fluid and prepare to make careful inspection of each part.

Control valve inspection repair:

Inspect all valves for burrs, scores or other damage, and for free movement in their bores. Inspect valve bodies for damage.

Free valve movement is checked with clean, dry valve and body. Valve should fall through its bore of its own weight, when body is

shaken. Valve burrs are removed with a fine, flat stone or crocus cloth. Take care not to round off the sharp square edges of the valves, since their functioning depends on this original contour.

Inspect plates and springs for damage and wear. Replace any damaged or worn parts.

Control valve reassembly:

Reassemble each part in its proper position in the reverse order of disassembly, checking each installation for freedom of movement.

### Noise in Plymouth Sixes Can Be Corrected

A SOUND similar to the knock caused by a loose main bearing, occurring at approximately 50 to 60mph on light acceleration, sometimes is evident in the 1960 and 1961 six-cylinder Plymouth cars.

A bulletin issued by Plymouth Di-

vision states that such a noise can be caused by exhaust pipe interference with the frame box section or the steering gear chuck to frame retaining bolts.

Correction can be obtained by shimming between the right motor mount and the frame bracket. Usually  $\frac{1}{8}$ " thick shim is sufficient.

### Roy L. Burton Dies In Ohio at 68

ROY L. BURTON, 68, who for 17 years was executive secretary of the Automotive Exhaust Research Institute, died suddenly at his home in Cleveland, Ohio, recently. He had retired from the institute last April.

Burton began his automotive career with General Motors Corp. in 1931. During his association with General Motors he was at one time zone business manager in Charleston, W. Va..



# Safety Checks Build Wheel-Balancing Volume

By **WILLIAM J. SHIPLEY**

Manager, H. B. Leary, Jr., and Bros., Inc.  
Washington, D. C.

**S**AFETY checks have built our wheel-balancing volume.

We tackle safety through direct-mail promotion in the spring and fall with specials at lowered prices, through newspaper advertising every 90 days in three large metropolitan dailies, weekly newspaper ads during slack periods, and catching every car we can that comes in here.

Every wheel freed from the ground by our twin-post lift gets a checkup on wheel balancing. As a result, our wheel balancing gained 12% in '60 over '59, an increase that tied in a gain in wheel alignment.

We do not stop with formal advertising or depend solely on traffic rolling in. I call our service customers by telephone when 90 days have elapsed and their cars have not had a safety checkup. Telling them how important safety checkups are from the viewpoints of safety, economy and car performance, I stress how vital regularity of these services are to the life of the car.

Since over the years we have built up a service customer file of over 5,500 names, our service gross for '60 approximated \$221,000. Of this our wheel balancing and wheel alignment amounted to \$15,000 last year.

When a service salesman or a mechanic has noted need for a wheel-balancing job, he points out that unbalanced wheels mean wear and tear to the steering mechanism. Front-end construction may be damaged. Tire wear occurs and parts are worn unevenly.

About one-third of the people contacted by the shop permit us to go ahead with a balancing job. Generally we can sell a wheel alignment when a balance job is sold, and the reverse.

If the customer has any doubt after we have shown him on his own car that his wheels are unbal-

anced, we remove the wheel and put it on our balancer. Indicating the difference when the wheel is rotated on the machine, the mechanic convinces a customer this job should be carried out.

If need for such a job is discovered after the customer has left, he notes this on the repair order and either the service manager or I call the customer and tell him why a balance job is important.

A telephone call that culminates in a sales transaction is reported to the mechanic who discovered the job and he may carry this work out.

Since our mechanics are on a 45-55 pay plan, they keep alert to wear and tear on every car.

We spend about \$1,500 on service promotion a year. Our spring and fall mailings comprise 5,000 pieces each, and safety items are underlined. Our newspaper advertising may emphasize front-end construction and brakes, usually tying in with mailed advertising.

We consistently invite and recommend safety inspections when customers come in, then later when they leave with regard to future checkups, and in any contact we have with them personally or by telephone.

Since we are a neighborhood garage with many regular customers patronizing us for many years, we feel an extra concern for their safety. The few customers who fail to return after our telephone call have either left the neighborhood or switched car make. (We were formerly franchised Chrysler dealers and draw a major portion of our volume from this make.)

The garage that wants to increase its wheel-balancing and wheel-alignment volume must concern itself with safety. The investment in machines is not large. We paid \$475

*(Continued on page 82)*

**"When wheels are out of balance it means wear and tear on the steering mechanism. Tire wear occurs and parts are worn unevenly," says this service manager who has in mind the safety of this prospective customer.**





**I**DEAS that could be helpful to automotive garages have gone into the new Transportation Branch Garage of the Tennessee Valley Authority at Knoxville, Tenn.

The old garage, in a congested site of the city, had problems much like those of many independent garages and dealerships today. There was not enough space. The building was crowded, operations cramped and the access was especially bad. Only one door could be used regularly and the driveway to it went over a railroad track spur and under a large overhead crane used by another company for loading steel. The crane had to be halted whenever a truck was to be driven in.

There was little parking space and supplemental space at the

By **WARNER OGDEN**

Singleton yards, ten miles out, had to be used.

Naturally, such conditions hampered service.

So something was done about it. As Thomas J. Hoskins, manager, Eastern District, 102 Arnstein Building, explained:

"We used our own experience to the best advantage we could. We patterned our new shop plans basically on the latest shop at Wilson Dam (Alabama), but incorporating into it all the improvements that our transportation staff branch and TVA design people could come up with.

"Staff members also visited some other shops and got ideas from au-

tomotive trade publications and Society of Automotive Engineers papers relating to both shop layouts and equipment.

"We had in mind increasing efficiency and reducing costs with the new facilities. We are pleased with the results."

The construction cost was \$409,154. The yard area, with plenty of space to park all kinds of vehicles, is approximately 135,000 square feet and the garage building, 80 by 294 feet, has 23,520 square feet.

The Knoxville garage service area extends south about half way to Chattanooga and up to 125 miles in other directions, including areas of Kentucky and North Carolina.

Types of shop work include special fabrication plus complete re-

This outside cargo elevator at rear of stock room is used in storing large tires, lubricant drums and other heavy materials on the second floor.



This is the view through the front area of the shop. Note use of retractable flexible ducts to carry away the carbon monoxide fumes.





pair, maintenance and overhaul of sedans; light, medium and heavy trucks up to 45,000 GVW; special trucks, trailers and construction equipment (crawler tractors, cranes, air compressors, hole diggers and Gradalls) used in the construction and maintenance of power distribution systems and other TVA activities.

There are complete services for about 250 units in the immediate Knoxville area and partial service for about 150 transient and additional units in the larger service area. Throughout a seven-state area, TVA has about 2,700 vehicles.

Here are some features of the garage:

1.—Plenty of high and wide doors along both sides, including the storage area. A vehicle can be driven straight through and none ever blocks another. The doors are aluminum and are raised or lowered by pushbuttons. Wooden doors at one garage were found unsatisfactory.

2.—An outside elevator at the rear of the stock room. It goes up to the second floor. Loading or unloading is quick and easy, without blocking anything.

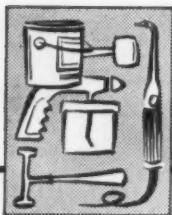
3.—Three twin-post lifts provide maximum accessibility for lubrication and mechanical work.

4.—A modern exhaust system, the layout for which was designed by

*(Continued on page 100)*



Photos at right: Top—Garage Supervisor Johnnie Chenoweth inspects the conveniently situated tool board, Center—This portable motor tester can easily be moved about in the commodious shop. Right—Foreman Mack C. Price keeps orders in slots in this box on which are names of mechanics. This is on the side of a telephone booth where a person can phone without being disturbed.



## BODY SHOP OPERATIONS

# Make Power Seats Safe, Too

By E. M. LOWERY

Technical Editor

**Q**UITE often, after hours of continuous driving, a driver may wish to change the position of the front seat in order to relieve fatigue. When such is the case and a movement of the seat control switch has no effect, the driver may attempt to see what is wrong, and for an instant forgets who is driving.

Driving is a full-time job, and often only a fraction of a second is all that is necessary for an accident to happen.

Power seats were designed to operate easily in order not to distract from the job of driving. Servicing them is what we consider a proper subject for this annual safety issue of SAJ.

Following is how to keep them in order on some of the most popular cars:

Chevrolet (1961):

Front seat assembly — six-way electric—models 1600 and 1800 series:

The electrically-operated six-way front seat assembly can be moved forward, rearward, upward, downward or tilted by means of a manually-operated seat control switch.

The large center control knob controls movement of the entire seat assembly horizontally or vertically. The smaller forward control knob controls the vertical movements of the front of the seat assembly, causing the seat assembly to tilt. In the same manner, the rear control knob controls vertical movement of the rear of the seat assembly.

This seat adjuster operating mechanism incorporates a transmission assembly which includes three solenoids and six drive cables leading to the seat adjusters.

Solenoid No. 1 (Fig. 1) controls the vertical movement of the rear edge of the seat. Solenoid No. 2 controls the horizontal movement of the seat. Solenoid No. 3 controls the

vertical movement of the front edge of the seat.

In addition to the six seat adjuster drive cables at the transmission assembly, a motor drive cable is installed from the motor to the transmission assembly (Fig. 1).

When one of the control switch buttons is actuated, the motor and one of the solenoids are energized simultaneously. The solenoid plunger engages the large gears with a driving gear. The driving gear rotates the large gears which rotate the drive cables and operate both adjusters.

When the switch contacts are opened, a spring returns the solenoid plunger to its original position, disengaging the large gears from

the driving gear.

Front seat assembly:

Removal and installation:

1.—Under front of seat, disconnect seat wire harness from feed wire harness and detach control switch harness from clip on floor pan.

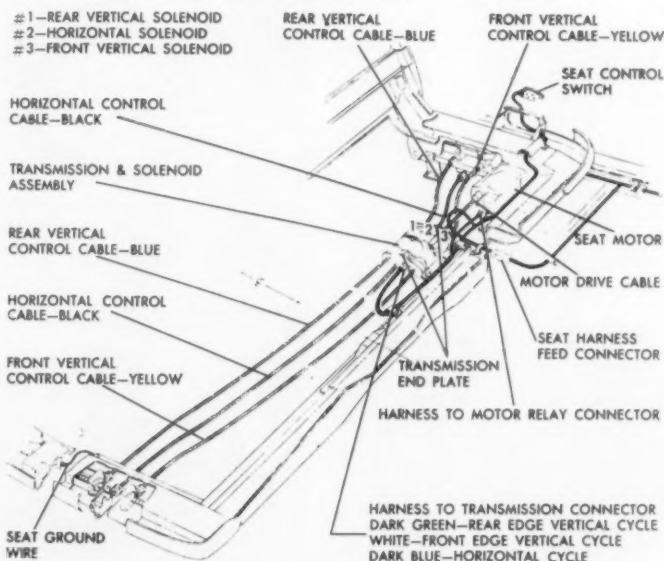
2.—Turn back floor carpeting, remove both seat adjuster track covers and remove four seat adjuster to floor pan attaching bolts from each adjuster. Remove carpet retainers at front of seat adjusters.

3.—With aid of a helper, remove seat assembly with attached adjusters, motor and transmission assembly from body.

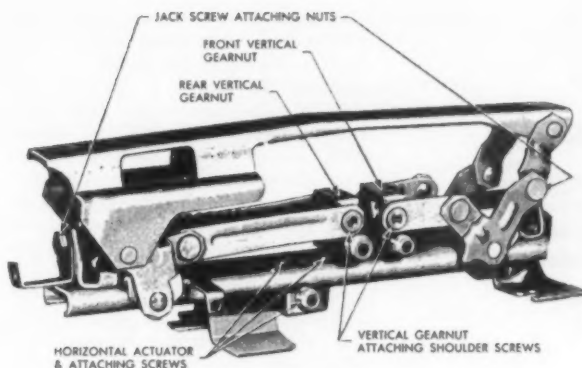
4.—To install seat assembly, reverse removal procedure. Make sure ground wire is securely attached at right seat adjuster and under seat adjuster to floor pan attaching bolt.

Front seat adjuster assembly:

Fig. 1—Six-way seat installation (1961 Chevrolet).

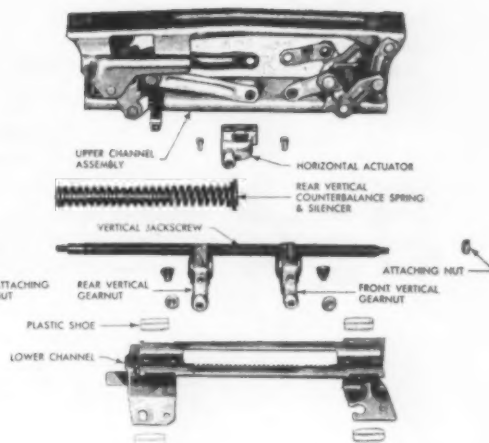






Above: Fig. 2—Six-way seat adjuster (Chevrolet).

Right: Fig. 3—Six-way seat adjuster assembly.



#### Removal and installation:

1.—Remove front seat assembly from body with attached adjusters, motor and transmission, and place upside down on a clean, protected surface.

2.—Detach the three power drive cables from adjuster to be removed (Fig. 1).

3.—Remove adjuster to seat bottom frame front and rear attaching bolts and remove adjuster from seat assembly.

4.—To install seat adjuster assembly, reverse removal procedure. Black cable attaches to horizontal actuator, yellow cable to front vertical gear nut and blue cable to rear vertical gear nut.

**Important:** When installing seat assembly in body, seat adjusters should be parallel and "in phase" with each other. In the event the adjusters are "out of phase" (that is, one adjuster reaches its maximum horizontal or vertical travel in a given direction before the other adjuster), proceed as follows:

a. Horizontal travel: operate seat control switch until one adjuster reaches full forward position. Detach horizontal drive cable from adjuster which has reached full forward position. Operate seat forward until other adjuster reaches full forward position; then connect horizontal drive cable and check horizontal travel of seat.

b. Front and rear vertical travel: operate seat control switch until one adjuster reaches fully raised position. Disconnect vertical drive cable from adjuster which has reached the full up position. Operate seat upward until other adjuster has reached the full up position; then connect the vertical drive cable and check vertical travel of seat.

Front seat adjuster vertical jack-screw gear nuts and spring:

#### Removal and installation:

1.—Remove seat assembly from body.

2.—Remove seat adjuster from side on which jack-screw is to be removed.

3.—Using clutch-type screwdriver or other suitable tool, remove shoulder screws securing linkages to vertical gear nuts (Fig. 2).

4.—Insert a No. 1 crosshead screwdriver or other suitable tool into drive cable slot in rear vertical gear nut and actuate rear vertical gear nut forward sufficiently to release compression of counterbalance spring.

**Note:** In some cases it may be necessary to actuate the front vertical gear nut forward to provide sufficient room for the rear vertical gear nut forward adjustment to release spring tension.

5.—Remove jack-screw front and rear attaching nuts (Fig. 3). Lift front end of jack-screw sufficiently to disengage from support; then disengage rear end of jack-screw from support and remove jack-screw, gear nuts and spring assembly from adjuster. Spring and spring silencer may now be removed from jack-screw. (See Fig. 3.)

6.—To remove vertical gear nuts, turn or actuate gear nuts off jack-screw.

7.—To install, reverse removal procedure, making sure jack-screw is installed with unthreaded shoulder at rear of adjuster and gear nuts

installed as shown in Fig. 2. Rear vertical gear nut, which has the larger diameter cable attachment, should be installed to the rear; front vertical gear nut, which has the smaller diameter cable attachment, should be installed at the front.

Both vertical gear nuts should have cable attachment at bottom and facing inside of adjuster (Fig. 2).

Front seat adjuster horizontal actuator or upper and lower channels:

#### Removal and installation:

1.—Remove front seat adjuster.

2.—Remove screws securing horizontal actuator from seat adjuster.

3.—Slide seat adjuster lower channel from upper channel and, if required, remove plastic shoes from lower channel track. (See Fig. 3.)

4.—To install, reverse removal procedure. If lower channel has been removed from upper channel, make sure all four plastic shoes are installed on lower track. Apply Lubriplate or equivalent to track portion of upper channel and to teeth on lower channel.

When installing horizontal actuator, adjust actuator so that drive gear is fully engaged with teeth on lower channel. When horizontal actuator screws are tightened, there should be no free motion between upper and lower channels.

Front seat adjuster electric motor or drive cable:

Removal and installation:

## May: Windshields of Compacts

Correct procedure for removing and replacing windshields of several compacts will be given, step by step, here next month by Technical Editor Lowery.

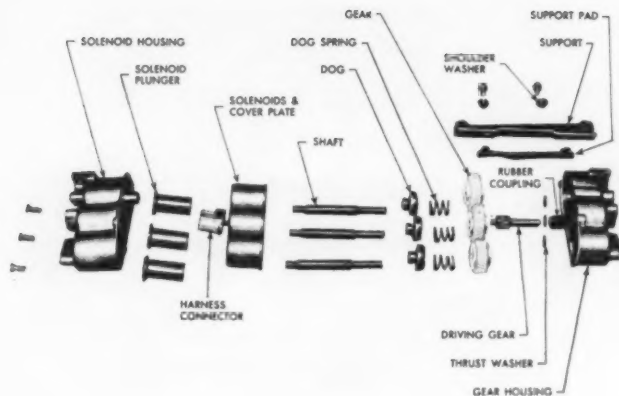


Fig. 4—Six-way seat transmission assembly (Chevrolet).

1.—Remove front seat assembly as previously described.

2.—Remove motor support to seat frame attaching bolts.

3.—Move motor assembly toward left side of seat sufficiently to disengage motor drive cable; then remove motor from support assembly. Motor drive cable may be removed, if required, by removing cable end plate from transmission.

4.—To install, reverse removal procedure, making sure motor drive cable is properly engaged at both motor and transmission.

Front seat adjuster horizontal and vertical drive cables:

Removal and installation:

1.—Remove front seat assembly from body with attached adjusters, motor and transmission and place upside down on a clean, protected surface.

2.—Detach both horizontal and vertical cables from seat adjuster.

3.—Remove screws securing horizontal and vertical cable end plate on side of transmission from which cables are being removed and remove cables from seat assembly; then disengage cables from end plate.

4.—To install horizontal and vertical cables, reverse removal procedure. Make sure cables are installed to correct gear nuts (Fig. 1).

Front seat adjuster transmission:

Removal and installation:

1.—Remove front seat assembly from body with attached adjusters, motor and transmission and place upside down on a clean, protected surface.

2.—Disconnect wire harness connector from transmission. (See Fig. 1.)

3.—Remove screws securing horizontal and vertical cable end plate on both sides of transmission and detach cables from transmission.

4.—Remove transmission to support attaching bolts; then disengage

transmission from motor drive cable and remove transmission from seat assembly.

5.—To install, reverse removal procedure.

Disassembly and assembly:

1.—Remove front seat adjuster transmission from seat assembly.

2.—Remove screw securing ground strap to solenoid housing and screws securing transmission support to gear and solenoid housings.

3.—Remove screws securing gear housing to the solenoid housing; then carefully separate housings and remove component parts of transmission assembly (Fig. 4).

4.—To assemble transmission, reverse removal procedure. Fig. 4 is an exploded view of disassembled transmission, showing parts in proper relationship for installation.

**Important:** Prior to or during installation, lubricate frictional surfaces of driving gear, thrust washer, large gears, dog washers, gear shaft and solenoid plungers with Lubriplate or equivalent.

Ford (1961):

This power seat is controlled by a single toggle switch which can be operated in four directions. The switch, mounted on the front seat

cushion left side shield and independent of the ignition switch, controls a single electric motor.

When the switch is operated for vertical seat motion, the left solenoid actuates the clutch and transmits power to the vertical screw. The seat is raised or lowered by two pivot arms at each side of the seat. The vertical motion is transmitted to the right seat track by a vertical equalizer bar (Fig. 5).

When the switch is operated for fore-or-aft movement of the seat, the right solenoid actuates the clutch and couples the motor to the horizontal screw. The fore-and-aft motion is transmitted to the right seat track by the horizontal equalizer bar.

Trouble diagnosis:

Fig. 6 shows a wiring diagram of the power seat electrical circuit. The following symptoms are sometimes found in power seat failures. The battery must be fully charged before any checks are made.

**Seat will not operate:**

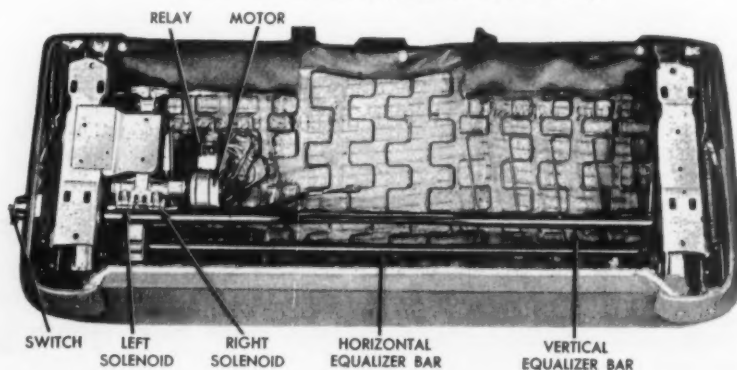
If the seat does not operate in any direction, the cause is likely to be an open circuit or power failure due to defective wiring, 30-amp circuit breaker, switch, relay or motor.

1.—Connect a voltmeter or a test light between the outlet terminal of the 30-amp circuit breaker and ground. The circuit breaker is located on the starter relay. If there is no voltage available, replace the 30-amp circuit breaker.

2.—Disconnect the double wire connector under the center of the seat near the grounding screw (Fig. 6). Connect a voltmeter or test light between the red wire and ground. If no voltage is available, repair or replace the wire and/or connections to the 30-amp circuit breaker.

3.—Disconnect the double connector at the seat control switch (Fig. 6). Connect a voltmeter or test light between the black-white stripe

Fig. 5—Underside view of power seat (1961 Ford).



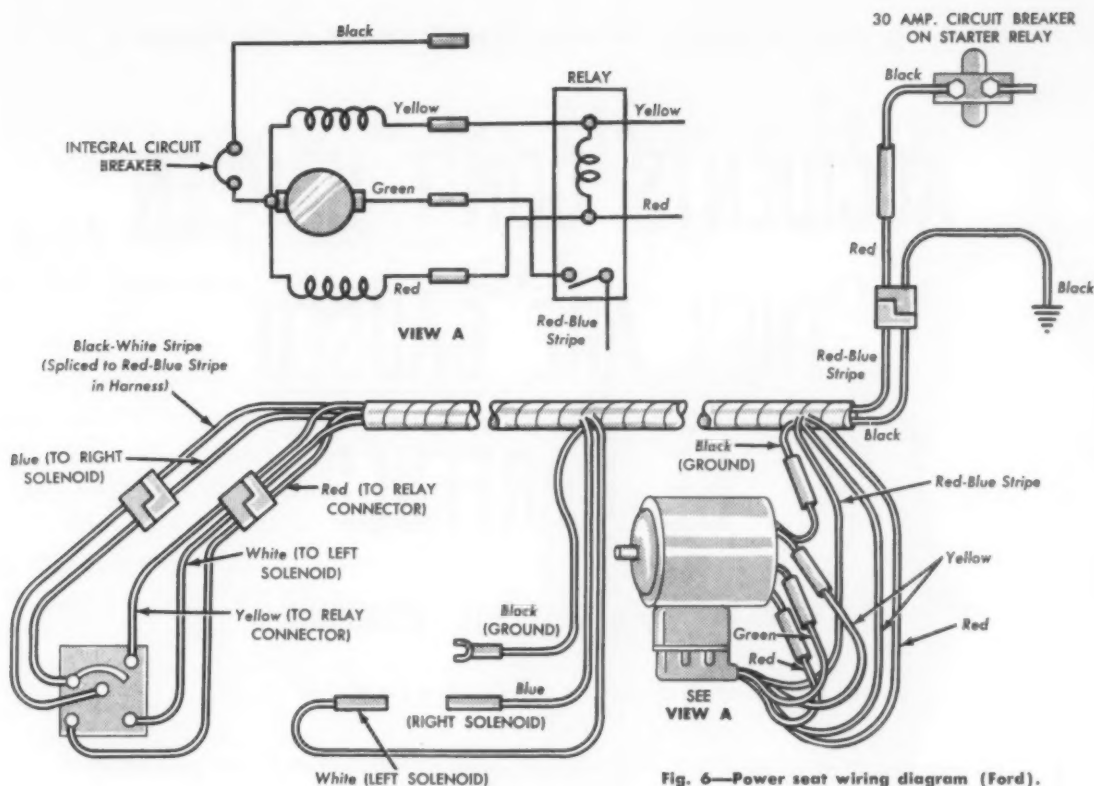


Fig. 6—Power seat wiring diagram (Ford).

wire of the harness and ground. If no voltage is available, repair or replace the wire. If voltage is available, connect the double connector and disconnect the triple connector.

With a voltmeter or test light, test each lead from the switch while the switch is operated. If no voltage is available at any of the wires, replace the switch.

4.—Connect a voltmeter from the red-blue stripe wire terminal of the relay connector to ground. If no voltage is available, repair or replace the wire.

5.—If the switch operates properly, disconnect the green wire at the motor. Connect a voltmeter between the green lead of the relay and ground. If no voltage is available when the switch is operated, replace the relay.

6.—Disconnect the black wire at the motor. Ground the motor black wire and actuate the seat switch. If the motor runs, the black ground wire should be repaired or replaced. If the motor does not run, the motor is defective.

#### Seat moves in one plane only:

If the seat moves in one plane only, the cause is likely to be a defective solenoid, switch or wires from the switch to the solenoid.

Actuate the seat switch and ob-

serve the solenoids. If a solenoid is inoperative, connect a voltmeter from the solenoid lead to ground. If voltage is indicated when the switch is activated, replace the solenoid. If no voltage is indicated, check for a defective wire or seat switch.

#### Motor replacement:

1.—Disconnect the wire connector from the seat regulator (Fig. 6) and the four wire connectors to the seat motor.

2.—Remove the power seat motor to housing retaining nuts. Remove the motor and rubber coupling from the housing.

3.—Transfer the seat regulator control relay and the rubber coupling to the new motor.

4.—Secure the motor to the seat mechanism housing with the retaining nuts.

5.—Connect the wires (Fig. 6) and check the seat operation.

#### Solenoid replacement:

A power seat with a defective solenoid can be moved into a convenient working position by operating the seat switch while manually actuating the yoke and clutch.

1.—Remove the seat regulator control solenoid to housing retaining screw.

2.—Disconnect the wire connector

at the solenoid and slide the solenoid from the solenoid shaft.

3.—Connect the wire to the solenoid, slide the solenoid onto the solenoid shaft, and install the solenoid retaining screw. Be sure to connect the ground wire (black) to the solenoid, if it was removed.

#### Power seat mechanism removal:

1.—Remove the seat track to floor pan retaining bolts. Disconnect the double wire connector at the floor pan beneath the center of the seat assembly. Remove the seat assembly from the car.

2.—Disconnect the seat switch wires at the left seat track. Remove the bolts retaining the seat tracks to the seat assembly and remove the seat track assembly.

3.—Disconnect the wires at the relay, motor and solenoid.

4.—Remove the clevis pins retaining the regulator to the seat track. Remove the shoulder bolts retaining the ball nut assemblies to the equalizer bar links and remove the regulator.

#### Power seat mechanism disassembly:

1.—Remove the regulator motor and coupling.

2.—Remove both solenoids and shaft, the yoke pin and yoke, worm  
(Continued on page 90)

Body Shop Owner or Foreman: You may want to place this on your bulletin board.

# ACCIDENTS DON'T HAPPEN THEY ARE CAUSED BE CAREFUL!

## SAFETY POINTERS FOR MECHANICS

*"An Ounce of Prevention Is Worth a Pound of Cure"*

1. Never depend on jacks or chain hoists alone to support a car you have to work under. Block it.
2. Use only electric extension lamps and portable electric tools with cords and fittings that are in good condition and grounded.
3. Be sure your feet are clear of passing automobiles or moving machinery when you get under a car.
4. Guard against carbon monoxide gas from the exhausts of running motors. See that there is proper ventilation.
5. Do not have gasoline standing around in open containers. Use mineral spirits or other relatively safer preparation to clean parts.
6. Never allow creepers to remain on floor when not in use.
7. Don't attempt to lift anything too heavy for you. Get help or use a hoist.
8. Watch the wrenches and other tools you use. Keep them free of oil and in safe working condition.
9. Keep a pair of safety goggles handy and wear them when doing any work in which eye protection is needed.
10. Keep aisles and open spaces on floor free of tools and parts.
11. Guard against flashes or explosions of gasoline vapors, anti-freeze solution vapors and hydrogen from storage batteries. Keep flames and sparks away.
12. If your clothes become soaked with oil or gasoline, change them. Don't take the risk of catching on fire.
13. Never consider a job complete until you have checked to assure all lock washers and cotter pins are in place.
14. Never allow grease or oil to remain on the floor where you and others might slip on it and fall.
15. Always keep a suitable fire extinguisher near and ready for use.

TEAR OUT ALONG THIS LINE



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says **CLAUDE DANIELS**,  
Lincoln-Mercury dealer, Augusta, Ga.

"In 10 years of dealing with Commercial Credit, I have found the provisions of their Plan are easier to live with in all the day-to-day problems that confront an automobile dealer. Commercial Credit is quick and courteous in handling deals. They don't cancel out collision and comprehensive insurance at the least scratch. And their national operation is a strong selling point with our customers. We find Commercial Credit sales training material very helpful and we offer bonuses to encourage our salesmen to sell more house plan deals."

## ***Commercial Credit serves successful dealers***

For complete information on how our service can help promote your success, call or write the Commercial Credit Corporation office nearest you.



# 1961 PASSENGER-CAR SPECIFICATIONS

(Souped-Up Specs on Standard Models Are Not Listed)

MAKE AND MODEL	Std. Wheelbase	TREAD		No. Cylinders and Valve Arrangement	Bore and Stroke	ENGINE					FLUID CAPACITIES					WHEEL ALIGNMENT		
		Front	Rear			Taxable H. P.	Max. Rated H. P. at R. P. M.	Max. Torque at R. P. M.	Piston Displacement (Cu. in.)	Standard Compression Ratio	Crankcase Cap. (Qtz.)	Transmission (A/C) (Pts.)	Fuel Tank (Gals.)	Cooling System (No. Water) (Qtz.)	Castor (Degrees)	Camber (Degrees)	Toe-In (In.)	
BUICK Special	112	56	56	V8I	3.50x2.80	39.2	155@4600	220@2400	215	8.8-1	4	12	16	12	— $\frac{1}{2}$	0 to $\frac{1}{4}$	$\frac{1}{8}$ to $\frac{1}{4}$	
BUICK Le Sabre	123	62	61	V8I	4.125x4.3	54.45	250@4400	384@2400	364	10.25-1	4	24	20	17	— $\frac{1}{2}$	$\pm \frac{1}{4}$	$\frac{1}{8}$ to $\frac{1}{4}$	
BUICK Invicta	123	62	61	V8I	4.1875x3.64	56.11	325@4400	445@2400	401	10.25-1	4	24	20	17	— $\frac{1}{2}$	$\pm \frac{1}{4}$	$\frac{1}{8}$ to $\frac{1}{4}$	
BUICK Electra	126	62	61	V8I	4.1875x3.64	56.11	325@4400	445@2400	401	10.25-1	4	24	20	17	— $\frac{1}{2}$	$\pm \frac{1}{4}$	$\frac{1}{8}$ to $\frac{1}{4}$	
CADILLAC 62 Sedan, 62 Coupe, 62 Coupe de Ville, 62 Sedan de Ville, 60 Fleetwood, 62 Eldorado and Biarritz	129.5	61	61	V8I	4x3.875	51.2	325@4800	430@3100	390	10.5-1	5	18	21	18 $\frac{1}{2}$	— $\frac{1}{2}$ to —1 $\frac{1}{2}$	F	$\frac{1}{8}$ to $\frac{1}{4}$	
CADILLAC Fleetwood 75	149.8	61	61	V8I	4x3.875	51.2	325@4800	430@3100	390	10.5-1	5	18	21	18 $\frac{1}{2}$	— $\frac{1}{2}$ to —1 $\frac{1}{2}$	F	$\frac{1}{8}$ to $\frac{1}{4}$	
CHEVROLET 8	119	60.3	59.3	6I	3.56x3.94	30.4	135@4000	217@2000	235.5	8.25-1	5	9	20	17	0 to $\pm \frac{1}{2}$	+30' to $\pm 30'$	$\frac{1}{8}$ to $\frac{1}{4}$	
CHEVROLET 8 (283 cu. in.)	119	60.3	59.3	V8I	3.875x3	48	170@4200	275@2200	283	8.5-1	4	9	20	17 $\frac{1}{2}$	0 to $\pm \frac{1}{2}$	+30' to $\pm 30'$	$\frac{1}{8}$ to $\frac{1}{4}$	
CHEVROLET 8 (348 cu. in.)	119	60.3	59.3	V8I	4.125x3.25	54.5	250@4400	355@2800	348	9.5-1	4	19	20	21	0 to $\pm \frac{1}{2}$	+30' to $\pm 30'$	$\frac{1}{8}$ to $\frac{1}{4}$	
CHEVROLET Corvair	108	54	54	6A	3.4375x2.6	28.4		145	8-1	4	6	14			3 $\frac{1}{2}$ to $\pm \frac{1}{2}$	$\frac{1}{4}$ to $\pm \frac{1}{2}$	$\frac{1}{8}$ to $\frac{1}{4}$	
CHEVROLET Corvette	102	57	59	V8I	3.875x3	48	230@4800	300@3000	283	9.5-1	5	9	16.4	15 $\frac{1}{2}$	2 $\pm 30'$	0 $\pm 30'$	0	
CHRYSLER Newport	122	61	59.7	V8I	4.12x3.38	54.3	265@4400	380@2400	361	9-1	5	22	23	16	C	B	$\frac{1}{4}$	
CHRYSLER Windsor	122	61	59.7	V8I	4.25x3.38	57.8	305@4600	410@2400	383	10-1	5	22	23	16	C	B	$\frac{1}{4}$	
CHRYSLER New Yorker	129	61.2	60	V8I	4.18x3.75	55.9	350@4600	470@2800	413	10-1	5	22	23	16	C	B	$\frac{1}{4}$	
CHRYSLER Imperial	129	61.8	62.2	V8I	4.18x3.75	55.9	350@4600	470@2800	413	10-1	5	22	23	16	C	B	$\frac{1}{4}$	
COMET (144.3 cu. in.)	114	55	54.5	6I	3.5x2.5	29.4	85@4200	134@2000	144.3	8.7-1	3 $\frac{1}{2}$	15	14	8.7	1 $\frac{1}{2}$ to $\frac{1}{2}$	0 to $\frac{1}{2}$ to $\frac{1}{2}$	$\frac{1}{8}$ to $\frac{1}{4}$	
COMET (170 cu. in.)	114	55	54.5	6I	3.5x2.94	29.4	101@4400	156@2400	170	8.7-1	3.5	15	14	8.7	1 $\frac{1}{2}$ to $\frac{1}{2}$	0 to $\frac{1}{2}$ to $\frac{1}{2}$	$\frac{1}{8}$ to $\frac{1}{4}$	
DE SOTO	122	61	59.7	V8I	4.12x3.38	54.3	265@4400	380@2400	361	9-1	5	22	20	16	C	B	$\frac{1}{4}$	
DODGE Lancer	106.5	56	55.5	6I	3.4x3.125	27.7	101@4400	155@2400	170	8.2-1	4	15	13	11	C	B	$\frac{1}{4}$	
DODGE Dart 8	118	61.5	60.1	6I	3.4x4.125	27.7	145@4000	215@2800	225	8.2-1	4	15	20	13	C	B	$\frac{1}{4}$	
DODGE Dart 8	118	61.5	60.2	V8I	3.91x3.31	48.9	230@4400	340@2400	318	9-1	5	20	20	13	C	B	$\frac{1}{4}$	
DODGE Polara	122	61.5	60.2	V8I	4.12x3.38	54.3	265@4400	380@2400	361	9-1	5	19	20	16	C	B	$\frac{1}{4}$	
FORD Fairlane 6	119	61	60	6I	3.62x3.6	31.54	135@4000	200@2000	223	8.4-1	4	20	20	15	$\pm \frac{1}{2}$	$\frac{1}{4}$ to 1	$\frac{1}{8}$ to $\frac{1}{4}$	
FORD Fairlane 500 8 and Galaxie (292 cu. in.)	119	61	60	V8I	3.75x3.3	45	175@4200	279@2200	292	8.8-1	5	20	20	19	$\pm \frac{1}{2}$	$\frac{1}{4}$ to 1	$\frac{1}{8}$ to $\frac{1}{4}$	
FORD Fairlane 500 8 and Galaxie (352 cu. in.)	119	61	60	V8I	4x3.5	51.2	220@4400	336@2400	352	8.9-1	5	20	20	19.5	$\pm \frac{1}{2}$	$\frac{1}{4}$ to 1	$\frac{1}{8}$ to $\frac{1}{4}$	
FORD Fairlane 500 8 and Galaxie (380 cu. in.)	119	61	60	V8I	4.05x3.78	52.49	300@4600	428@2800	390	9.6-1	5	20	20	19.5	$\pm \frac{1}{2}$	$\frac{1}{4}$ to 1	$\frac{1}{8}$ to $\frac{1}{4}$	
FORD Falcon (170 cu. in.)	109.5	55	54.5	6I	3.5x2.94	29.4	101@4400	156@2400	170	8.7-1	4 $\frac{1}{2}$	12 $\frac{1}{2}$	14	8.7	$\pm \frac{1}{2}$	$\frac{1}{4}$ to $\pm \frac{1}{2}$	$\frac{1}{8}$ to 5/16	
FORD Thunderbird	113	61	60	V8I	4.05x3.78	52.49	300@4600	427@2800	390	9.6-1	5	20	20	19.5	— $\frac{1}{2}$ to —1 $\frac{1}{2}$	0 to +1	$\frac{1}{8}$ to $\frac{1}{4}$	
FORD Falcon (144.3 cu. in.)	109.5	55	54.5	6I	3.5x2.5	29.4	85@4200	138@2000	144.3	8.7-1	4 $\frac{1}{2}$	3 $\frac{1}{2}$	14	8.7	— $\frac{1}{2}$ to —1 $\frac{1}{2}$	0 to +1	$\frac{1}{8}$ to $\frac{1}{4}$	
LINCOLN Continental	123	62.1	61	V8I	4.3x4.7	59.17	300@4100	465@2000	430	10-1	5	23	21	22	0 to —90°	0 to 45°	.063 to .188	
MERCURY Meteor 600	120	61	60	6I	3.62x3.6	31.54	135@4000	200@2000	223	8.4-1	4	19	20	15	$\pm \frac{1}{2}$	+ $\frac{1}{4}$ to +1	$\frac{1}{8}$ to $\frac{1}{4}$	
MERCURY Meteor 600 and Monterey (292 cu. in.)	120	61	60	V8I	3.75x3.3	45	175@4200	279@2200	292	8.8-1	5	20	20	19	$\pm \frac{1}{2}$	+ $\frac{1}{4}$ to +1	$\frac{1}{8}$ to $\frac{1}{4}$	
MERCURY Meteor 600 and Monterey (352 cu. in.)	120	61	60	V8I	4x3.5	51.2	220@4400	336@2400	352	8.9-1	5	20	20	19.5	$\pm \frac{1}{2}$	+ $\frac{1}{4}$ to +1	$\frac{1}{8}$ to $\frac{1}{4}$	
MERCURY Meteor 600 and Monterey (380 cu. in.)	120	61	60	V8I	4.05x3.78	52.5	300@4600	427@2800	390	9.6-1	5	20	20	19.5	$\pm \frac{1}{2}$	+ $\frac{1}{4}$ to +1	$\frac{1}{8}$ to $\frac{1}{4}$	
OLDSMOBILE F85	112	56	56	V8I	3.5x2.8	39.2	155@4800	210@3200	215	8.75-1	4	12	16	11	— $\frac{1}{2}$ to —1 $\frac{1}{2}$	0 to + $\frac{1}{4}$	$\frac{1}{8}$	
OLDSMOBILE 88	123	61	61	V8I	4.125x3.687	54	250@4200	405@2400	394	8.75-1	4	11	20	19 $\frac{1}{2}$	0 to —1	— $\frac{1}{4}$ to + $\frac{1}{4}$	0 to $\frac{1}{4}$	
OLDSMOBILE Super 88	123	61	61	V8I	4.125x3.687	54	325@4600	435@2800	394	10-1	4	11	20	19 $\frac{1}{2}$	0 to —1	— $\frac{1}{4}$ to + $\frac{1}{4}$	0 to $\frac{1}{4}$	
OLDSMOBILE 98	126	61	61	V8I	4.125x3.687	54	325@4600	435@2800	394	10-1	4	11	20	19 $\frac{1}{2}$	0 to —1	— $\frac{1}{4}$ to + $\frac{1}{4}$	0 to $\frac{1}{4}$	
PLYMOUTH 6 Savoy, Belvedere and Fury	118	60.9	59.6	6I	3.4x4.125	27.7	145@4000	215@2800	225	8.2-1	4	15	20	13	C	B	$\frac{1}{4}$	
PLYMOUTH 8 Savoy, Belvedere and Fury	118	60.9	59.6	V8I	3.91x3.31	48.9	230@4400	340@2400	318	9-1	5	20	20	20	C	B	$\frac{1}{4}$	
PLYMOUTH Super Fury 8	118	60.9	59.6	V8I	3.91x3.31	48.9	260@4400	345@2800	318	9-1	5	19	20	20	C	B	$\frac{1}{4}$	
PLYMOUTH Valiant	106.5	56	55.5	6I	3.4x3.125	27.7	101@4400	155@2400	170	8.2-1	4	15	13	11	C	B	$\frac{1}{4}$	
PONTIAC Catalina and Ventura	119	62.5	62.5	V8I	4.06x3.75	52.8	215@3600	390@2000	389	8.6-1	4	12	25	18 $\frac{1}{2}$	—1 $\frac{1}{2}$ to + $\frac{1}{2}$	+ $\frac{1}{4}$ to $\pm \frac{1}{2}$	0 to $\frac{1}{4}$	
PONTIAC Star Chief and Bonneville	123	62.5	62.5	V8I	4.06x3.75	52.8	235@3600	402@2000	389	8.6-1	4	18	25	18 $\frac{1}{2}$	—1 $\frac{1}{2}$ to + $\frac{1}{2}$	+ $\frac{1}{4}$ to $\pm \frac{1}{2}$	0 to $\frac{1}{4}$	
PONTIAC Tempest 4	112	56.8	56.8	4I	4.6x3.75	26.4	100@3800	190@2000	194.5	8.6-1	4	4	15.5	11.6	—1.40° to $\pm \frac{1}{2}$	+0.8° to $\pm \frac{1}{2}$	0 to $\frac{1}{4}$	
PONTIAC Tempest 8	112	56.8	56.8	V8I	3.5x2.8	39.2	155@4600	220@2400	215	8.8-1	4	4	15.5	11.6	—1.40° to $\pm \frac{1}{2}$	+0.8° to $\pm \frac{1}{2}$	0 to $\frac{1}{4}$	
RAMBLER American—De Luxe and Super	100	54.62	55	6I	3.125x4.25	23.44	90@3800	160@1600	195.6	8-1	4	20	20	11	D	0 Prf.	$\frac{1}{8}$ to $\frac{1}{4}$	
RAMBLER American Custom	100	54.62	55	6I	3.125x4.25	23.44	125@4200	180@1600	195.6	8.7-1	4	20	20	10	D	0 Prf.	$\frac{1}{8}$ to $\frac{1}{4}$	
RAMBLER 8	108	57.75	58	6I	3.125x4.25	23.44	127@4200	180@1600	195.6	8.7-1	4	20	20	9 $\frac{1}{2}$	D	0 Prf.	$\frac{1}{8}$ to $\frac{1}{4}$	
RAMBLER 8	108	58.75	59.12	V8I	3.5x3.25	39.2	200@4900	245@2500	250	8.7-1	4	20	20	19	E	0 Prf.	$\frac{1}{8}$ to $\frac{1}{4}$	
RAMBLER Ambassador	117	57.75	59.12	V8I	4x3.25	51.2	250@4700	340@2600	327	8.7-1	4	22	20	18	E	0 Prf.	$\frac{1}{8}$ to $\frac{1}{4}$	
STUDEBAKER Lark 8	108.5	57.37	56.56	6I	3x4	21.6	112@4500	154@2000	169.6	8.5-1	5	18	18	11	$\pm \frac{1}{2}$ 0 Prf.	0 to +1	$\frac{1}{8}$ to $\frac{1}{4}$	
STUDEBAKER Lark 8	108.5	57.37	56.56	V8I	3.56x3.25	40.6	180@4500	260@2800	259.2	8.8-1	5	18	18	17	$\pm \frac{1}{2}$ 0 Prf.	0 to +1	$\frac{1}{8}$ to $\frac{1}{4}$	
STUDEBAKER Hawk Coupe	120.5	57.37	56.56	V8I	3.56x3.62	40.6	210@4500	300@2800	289	8.8-1	5	18	18	17	— $\frac{1}{2}$ to —3	0 to + $\frac{1}{2}$	$\frac{1}{8}$ to $\frac{1}{4}$	

## ABBREVIATIONS

A—Horizontally opposed.  
B—Left + $\frac{1}{2}$ , right + $\frac{1}{4}$ .  
C—Power steering + $\frac{1}{4}$   $\pm \frac{1}{2}$ .  
Manual  $\pm \frac{1}{2}$ .

D—Manual steering + $\frac{1}{2}$  Prf.  
Power steering +2 Prf.  
E—Manual steering + $\frac{1}{2}$  Prf.  
Power steering +1 Prf.  
F—Left + $\frac{1}{2}$  to  $\frac{1}{4}$ , right + $\frac{1}{4}$  to — $\frac{1}{4}$ .

I—Valve-in-head.  
L—L-head.  
Prf.—Preferred.



# Why AirCon "Freon" 12 Refrigerant is better in 4 major ways

## 1 Easier, More Convenient to Use

AirCon's precision packaged "Freon" 12 in disposable, 15-ounce containers represents the faster, more profitable way to service auto air conditioners. This convenient container once and for all does away with hard-to-handle tanks, faulty scales and the inaccuracy of sight glasses that never tell you 'when'.

With AirCon "Freon" 12 in cans there are never any deposits, left overs or loss of profits.

## 2 Eliminates Guesswork

Every can of AirCon "Freon" 12 is pre-measured at the factory to exactly 15 ounces. This means your profits are always protected because you know exactly the amount of AirCon "Freon" you are using. There is never any guessing about what to charge the customer. You know because you have the empty cans to prove it.

Start protecting your profits now with the convenient AirCon can today!

## 3 100% Pure — Not a Trace of Contamination

As an auto air conditioning service man you know how important cleanliness is. Allstadt Mfg. Co., marketer of AirCon "Freon" 12, is not an aerosol loader for insecticides, hair sprays or other products. Pure, 100% pure, "Freon" 12 is the only product that is allowed to pass through our surgically cleaned packaging machines.

## 4 Available at Your Near-by Jobber

AirCon "Freon" 12 is as near and convenient as your near-by automotive parts wholesaler. Just by calling your jobber you can order any quantity of AirCon "Freon" 12 along with other parts and supplies.

When you get it from your jobber there's no need to worry or wait on delivery!



## ... AirCon Refrigerant Oil, Too!

Also available at your jobber is this handy, 30-ounce container of Type 300 AirCon Refrigerant Oil. Used in all makes of auto air conditioner compressors, AirCon Refrigerant Oil is packaged under the same rigid specifications used for AirCon "Freon" 12.

Allstadt Mfg. Co. is the largest exclusive packager of "Freon" 12 in the world. "Freon" 12 and Refrigerant Oil are the company's only business. For guaranteed quality and purity, ask your jobber for the products bearing the familiar AirCon label. It's your assurance of the best!

**Air Con**

**ALLSTADT MFG. CO.**  
2004 Wall Street — Dallas, Texas

# 1961 PASSENGER-CAR SPECIFICATIONS

(Souped-Up Specs on Standard Models Are Not Listed)

MAKE AND MODEL	ELECTRICAL TUNE-UP							Bat.	FUEL SYSTEM		VALVES			
	Breaker Gap (.0)	Cam Angle (Degrees)	Contact Arm Spring Tension (Ozs.)	Ignition Timing (Degrees)	Timing Mark Location	Spark Plug Gap (.0)	Spark Advance (Max. Centrif. (Degrees))		Spark Advance (Max. Vac. (Degrees))	Cap. & Ter. Gnd.	Carb. Mfr.	Fuel Pressure (Lbs.)	Tappet Clearance Intake (.0)	Tappet Clearance Exhaust (.0)
BUICK Special	13-19	30±1	19-23	7.5@1050rpm	VD	30-35	17@2100	17.5@16°	40N	RP	4½-5½	Au	Au	29bte
BUICK Le Sabre	13-19	30±1	19-23	12@400	VD	30-35	22@3800	17.5@18°	70N	RP-St	5-6½	Au	Au	31bte
BUICK Invicta and Electra	13-19	30±1	19-23	12@400	VD	30-35	22@3800	17.5@18°	70N	RP-Ca	5-6½	Au	Au	33bte
CADILLAC (All Models)	16	28-32	19-23	5@480	VD	35	9@2000	12@20°	70N	RP-Ca	5½-6½	Au	Au	39bte
CHEVROLET 8	19	28-35	19-23	5bte	FW	33-38	10@1400	22@15.5°	53N	RP	3½-4½	Aut	Aut	16bte
CHEVROLET V-8 (283 cu. in.)	19	26-33	19-23	4bte	VD	33-38	28@3750	15@15.5°	53N	RP-Ca	5½-6½	Aut	Aut	18bte
CHEVROLET V-8 (348 cu. in.)	19	26-33	19-23	8bte	VD	33-38	24@4600	15@15.5°	61N	RP-Ca	5½-6½	Aut	Aut	18½bte
CHEVROLET Corvair	19	32-34	19-23	4bte	CsP	35	32@3600a	23@15.2b	35N	RP	5½-6½	Aut	Aut	43bte
CHEVROLET Corvette	19	26-33	19-23	4bte	VD	33-38	28@3700	15@15.5°	53N	Ca	5½-6½	Aut	Aut	12½bte
CHRYSLER Newport	14-19	27-32	17-21.5	10bte	VD	35	24@4100	22@15°	60N	St	4-5	Au	Au	15bte
CHRYSLER Windsor	14-19	27-32	17-21.5	10bte	VD	35	24@4100	22@15°	60N	Ca	4-5	Au	Au	15bte
CHRYSLER New Yorker and Imperial	14-19	27-32	17-21.5	10bte	VD	35	21@4600	22@15°	70N	Ca	4-5	Au	Au	15bte
COMET (144.3 cu. in.)	24-26	35-38	17-20	C	CsP	32-36	F	28@5.35°	40N	Ho	4-5	16	16	15bte
COMET (170 cu. in.)	24-26	35-38	17-20	10@500	CsP	32-36	F	19.8@3°	40N	Ho	4-5	16	16	15bte
DE SOTO	14-19	27-32	17-21.5	10bte	CsP	35	24@4100	26@16°	60N	St	4-5	Au	Au	13bte
DODGE Lancer	17-23	40-45	17-21.5	2.5bte	CsP	35	27@3850	25@14.5°	50N	Ca	4-5	10	20	8bte
DODGE Dart 8	17-23	40-45	17-21.5	2.5bte	CsP	35	25@4400	20.6@12°	50N	Ca	4-5	10	20	8bte
DODGE Dart 8	14-19	27-32	17-21.5	5bte	CsP	35	25@4600x	30@17°	50N	St	4-5	10	18	17bte
DODGE Polara	14-19	27-32	17-21.5	10bte	CsP	35	24@4100	26@16°	60N	St	4-5	Au	Au	15bte
FORD Fairlane 8	24-28	35-38	17-20	10@500	VD	32-36	F	26@8.3°h	55N	Ho	4-5	19	19	23bte
FORD Fairlane 500 8 and Galaxie (292 cu. in.)	14-16	26-28½	17-20	10@500	VD	32-36	23@4000	25@19°h	55N	Ford	4½-5½	18	18	12bte
FORD Fairlane 500 8 and Galaxie (352 cu. in.)	14-16	26-28½	17-20	6@500	VD	32-36	23@4000	25@16°h	65N	Ford	4½-5½	Au	Au	22bte
FORD Fairlane 500 8 and Galaxie (390 cu. in.)	14-16	26-28½	17-20	6@500	C	VD	32-36	15@17°h	65N	Ford	4½-5½	Au	Au	26bte
FORD Falcon (144.3 cu. in.)	24-26	35-38	17-20	C	CsP	32-36	F	28@5.35°h	40N	Ho	4-5	16	16	15bte
FORD Falcon (170 cu. in.)	24-26	35-38	17-20	4bte	CsP	32-36	0@0°	24½@3°h	40N	Ho	4-5	16	16	15bte
FORD Thunderbird	14-16	26-28½	17-20	6@500	VD	32-36	23@4000	15@17°	65N	Ford	4½-5½	Au	Au	26bte
LINCOLN Continental	15	26-28½	17-20	6bte	VD	34	30@4000	22@18°	80N	Ca	5-6	Au	Au	22bte
MERCURY Meteor 800	24-28	35-38	17-20	10@500	VD	32-36	F	26@8.3°	55N	Ho	4-5	19	19	23bte
MERCURY Meteor 800 and Monterey (292 cu. in.)	14-16	26-28½	17-20	10@500	VD	32-36	23@4000	25@19°	55N	Ford	4½-5½	18	18	12bte
MERCURY (352 cu. in.)	14-16	26-28½	17-20	6@500	VD	32-36	26@4000	25@16°	65N	Ford	4½-5½	Au	Au	22bte
MERCURY (390 cu. in.)	14-16	26-28½	17-20	6@500	VD	32-36	23@4000	15@17°	65N	Ford	4½-5½	Au	Au	26bte
OLDSMOBILE F85	13-18	28-32	19-23	5bte	CsP	40	26@4200	25@16°	40N	RP	4-5½	Au	Au	22bte
OLDSMOBILE Dynamic 88	16	28-32	19-23	5bte	VD	30	26@4400	23½@21°	60N	RP	5-6	Au	Au	14bte
OLDSMOBILE Super 88 and 98	16	28-32	19-23	5bte	VD	30	26@4400	23½@21°	70N	RP	5-6	Au	Au	11bte
PLYMOUTH 6 Savoy, Belvedere and Fury	17-23	40-45	17-21.5	25bte	CsP	35	25@4400	20.6@12°	50N	Ca	4-5	10	20	8bte
PLYMOUTH 6 Savoy, Belvedere and Fury	14-19	27-32	17-21.5	5bte	CsP	35	20@4600	30@17°	50N	Ca-St	4-5	10	18	17bte
PLYMOUTH Super Fury	14-19	27-32	17-21.5	10bte	CsP	35	19@4400	23@13.2°	50N	Ca	4-5	10	18	13bte
PLYMOUTH Valiant	17-23	40-45	17-21.5	2.5bte	CsP	35	26@3850	25@14.5°	50N	Ca	4-5	10	20	8bte
PONTIAC Catalina and Ventura	16	30±2	19-23	6bte	CsP	33-38	22@3600	20@15°	K	RP	5½-6½	Au	Au	14bte
PONTIAC Star Chief and Bonneville	16	30±2	19-23	6bte	CsP	33-38	20@2850	20@17°	K	RP	5½-6½	Au	Au	14bte
PONTIAC Tempest 4	13-19	73-77	19-23	6bte	CsP	33-38	22@3750	20@15°	42N	RP	4-5½	Au	Au	14bte/
PONTIAC Tempest 8	13-19	28-32	19-23	5bte	VD	30-34	28@3700	16@15.7°	42N	RP	4-5½	Au	Au	29bte
RAMBLER American De Luxe and Super	17-22	37-41	17-22	3bte	VD	33-37	14@4000	11@11°	40N	Ca	4-5½	16	18	10bte
RAMBLER American Custom	16	28-35	19-23	8bte	VD	33-37	22@4000	22@16.5°	45N	Ho	4-5½	12	16	12½bte
RAMBLER 8 De Luxe and Super	16	28-35	19-23	8bte	VD	33-37	22@4200	22@16.5°	45N	Ca-Ho	4-5½	12	16	12½bte
RAMBLER 8 De Luxe, Super and Custom	14-19	28-32	17-22	tdcg	VD	33-37	36@3800	20@15°	50N	Ho	4-5½	12	14	12½bte
RAMBLER Ambassador	14-19	28-32	17-22	tdcg	VD	33-37	36@3800	20@15°	60N	Ho	4-5½	Au	Au	12½bte
STUDEBAKER Lark 8	17-22	37-41	17-22	2bte	VD	33-38	26@1800	16@13°	50N	Ca	3½-5½	J	L	15bte
STUDEBAKER Lark 8 and Hawk Coupe	16	28-32	19-23	4bte	VD	33-38	26@2200	18@13°	50N	St	3½-5½	J	L	11bte

## ABBREVIATIONS

a—Powerglide 20@3600.  
Super Turbo 24@4800.  
Au—Automatic transmission.  
Aut—Automatic.  
Super Turbo 23@15.2°.  
b—Powerglide 23@16.2°.  
bte—Before top center.  
C—2°bte manual, 6°bte automatic.  
c—Super Turbo air 54bte.

Ca—Carter.  
CsP—Crankshaft pulley.  
d—Manual trans. 5bte.  
Auto. trans. 10bte.  
e—Manual trans. 5bte.  
Auto. trans. 10bte.  
F—Non centrifugal.  
f—Auto. trans. 30°.  
FW—Flywheel.  
g—Auto. trans. 5bte.

h—Automatic transmission.  
Ho—Holley.  
J—23-25.  
K—50 or 60N.  
L—25-27.  
N—Negative.  
RP—Rochester Products.  
St—Stromberg.  
VD—Vibration damper.  
x—Auto. trans. 20@4600.



# LET'S TALK ABOUT PRICE CUTTING AND ANTI-FREEZE...

*Are "do-it-yourself" sales to blame for price cutting?... What's behind the "do-it-yourself" trend?... Can an anti-freeze manufacturer prevent price cutting?... How can dealers protect their profits?... What is the biggest anti-freeze brand doing for the dealer?*

The makers of "PRESTONE" brand Anti-Freeze want to give you some answers to these questions.

All talk about pricing must start with this fact—*there has been a revolutionary change in motorists' buying habits since 1950!* In 1950, only 5% of the motorists installed their own anti-freeze. Today, that figure seems to be leveling off somewhere under 50%. Yet never has "PRESTONE" brand (or any other major brand) advertised to encourage "do-it-yourself" sales. In fact, "PRESTONE" brand has spent hundreds of thousands of dollars over the years to advertise the importance of the SERVICE that goes with installation *by the dealer.*

## **Why do so many motorists install their own anti-freeze?**

Today, "do-it-yourself" is almost a way of life in the U.S.A. And many motorists have the idea that "dumping in" anti-freeze is all it takes to winterize a car in spite of our powerful advertising to the contrary. Often, it's the service dealer who's responsible for this—the dealer who fails to give proper service—especially after freezing weather hits and installations are "rush" jobs. Incidentally, it's most important that a dealer giving proper service let his customers *know* about this service.

At first, over-the-counter marketers sold only private brands. But, in time, they began to feature those that are well-known and highly advertised. And, since "PRESTONE" brand is the best-selling anti-freeze, these marketers go out of their way to feature it and to advertise it.

## **Why is there price cutting in some areas?**

Many highly competitive over-the-counter retailers shave their profits to get larger volume. Others will even lose money on well-known brands to draw customers into their stores.

## **Can "Prestone" brand stop price cutting?**

"PRESTONE" brand has obtained hundreds of injunctions against cut-rate retail organizations prohibiting them from selling below minimum retail prices established under fair trade laws. But this is only possible in states having effective fair trade laws. In other states, a manufacturer is prohibited by law from establishing minimum retail prices.

## **How can service dealers recover their anti-freeze profits?**

Sell *Service*, and sell it *Early!* The more you push service, the less competition you'll find from the retailers who do not provide service. The more service you *Sell*, the more profits you'll make on related items such as thermostats, hoses and pressure caps, etc.

## **What will "Prestone" brand do to support service dealers?**

"PRESTONE" brand will continue to sell the *need* for proper servicing. You'll see powerful advertising, including *Nation-Wide TV Commercials*, featuring you, the dealer who provides service. "PRESTONE" brand spends a tremendous amount of money for this kind of dealer-support!

## **Let's talk about service?**

You don't have to cut prices to sell anti-freeze! Thousands and thousands of dealers have *improved* their anti-freeze business without cutting prices. They did it by selling service.

*First*, tell your customers of the vital winter servicing their cars really need. *Then*, explain the danger of merely "freshening up" anti-freeze. Never fail to point out the troubles that can be caused by poor winterizing.

Remind your customers that proper draining of the cooling system is important...and that *you* have the equipment to do it properly.

Start early...but be sure to make it easy for customers by giving them *the brand they ask for*. You can and *will* lose sales by fighting your customers' preferences...and this is something the over-the-counter marketers *never* do. You can win back the discount shopper and the "do-it-yourself" motorist because you—the *service dealer*—are not only in a position to attach the famous "PRESTONE" brand *Green Tag*...but you can also give your customer the *Service* the *Green Tag* calls for.



UNION CARBIDE CONSUMER PRODUCTS COMPANY • Division of Union Carbide Corporation • 270 Park Avenue, New York 17, N. Y.



## CAMEL CHEMBOND TUBELESS TIRE REPAIRS



### HANDY DISPENSING CABINET FILLED WITH CHEMBOND REPAIR ASSORTMENT

Ideal workbench dispensing cabinet filled with complete needs to make "life of the tire" repairs. Conveniently compact, prevents waste and keeps all contents clean and immediately available. Fully stocked: 200 assorted patches, 1/2 pt. CHEMBOND Cement, one buffer-stitcher.

### CHEMBOND PATCHES ACTUALLY FLOW INTO THE INJURY!



The live rubber flows naturally into the injured area (above), sealing out dirt and moisture to protect the cord fabric. Perma-

nent bond when applied either hot or cold to tubeless tires or tubes. Patch edges are extremely feathered.

**H.B. EGAN MANUFACTURING COMPANY**  
MUSKOGEE, OKLAHOMA      TORONTO, CANADA



St. Louis Ford dealers on hand to take delivery of the first 50 Fords produced at Ford Motor Co.'s Hazelwood Assembly plant since 1943 included (l. to r.): Jack Heutel of Sunset Auto Co.; George Pappas of George Pappas Ford Center; B. E. Hohlt of B. E. Hohlt, Inc.; Ray Crocker of Suburban Motors, Inc.; Dave Riesmeyer of Riesmeyer Ford; Frank E. Wilde, St. Louis plant manager; Tom Costello of Costello-Kunze Ford, Inc.; Fred Baler of Mendenhall Motor Co.; Willis Broadhead of Broadhead Motor Co.; Guy Hamilton, Jr., Ford Division's St. Louis district sales manager; Vincent McMahon of McMahon Ford Co.; Ken Bender of Patterson Ford; Lowell Sutton of Sutton Ford, Inc.; Bill Kribs of Kribs Ford, Inc.; Adolph Roeper of Roeper Ford, Inc.; and Al Monte and Ed Stivers of Stivers Auto Sales, Inc. The plant has switched from Mercury to standard-size Fords.

### GM Doubles Allowance On School Loan Cars

GENERAL Motors will double the allowance given its dealers who lend cars to high schools for driver training programs, President John F. Gordon announced.

The allowance, to be granted retroactive to the start of the 1960-61 school year, will be \$250. It has been \$125 since GM pioneered the plan in 1955. The action was taken, Gordon said, to encourage maximum dealer participation in the program and in recognition of the increased costs incurred by dealers lending cars for this purpose.

Under terms of the plan, a dealer receives the allowance from the corporation for each new Buick, Oldsmobile, Pontiac or Chevrolet lent to schools for driver training. A further requirement is that cars must be equipped with two approved-type front seat belts, dealer-installed at factory expense.

GM's contribution to the program during the 1959-60 school year totaled nearly \$500,000 on almost 4,000 cars. Since 1955, allowances have totaled \$2,697,500 on 21,580 cars.

**STAY AHEAD OF THE**

**8**

**RACK  
UP  
EXTRA  
PROFITS**



**TURN THE PAGE**

For a cue on how to put more money in your side pocket



# POCKET MORE MONEY

HERE'S YOUR CUE SHEET ON HOW WYNN'S SPOTS THE TROUBLE,



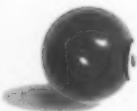
**MAINTAIN LIKE-NEW POWER AND PERFORMANCE?**

Chemically smooths and seals roughened engine parts and holds wear to an absolute minimum.



**STICKING VALVES? SLUGGISH ENGINES?**

Guaranteed to free sticking valves and re-power engines within minutes or customer gets money back.



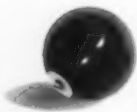
**UPPER CYLINDER PROTECTION?**

Lubricates top cylinder area even at combustion temperatures. Stops excessive top ring wear and guards against carbon build-up.



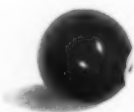
**LEAKY RADIATOR? WATER PUMP NEED LUBRICATING?**

Complete cooling system protection. Seals and prevents radiator leaks. Prevents and removes scale and rust. Lubricates water pump. Works in all coolants including antifreezes and hard water.



**POWER STEERING SQUEAL? GEARS NOISY?**

Ends power steering noise. Mixed with lubricants, eases manual shifting and reduces gear howl in manual transmissions and differentials.



**DIRTY, SLUGGISH ENGINE?**

Flushes engines in 35 minutes. Quick, easy way to remove sludge, gum and dirt without dismantling engine.





**WITH**

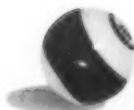
**WYNN'S**

**MOST COMPLETE LINE OF ADDITIVES**

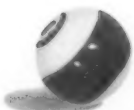
**CURES & PREVENTS THESE TROUBLES IN YOUR CUSTOMERS' CARS**



**SMOKING TOO MUCH? BURNING TOO MUCH OIL?**  
Reduce oil burning and exhaust smoking fast with the first easy-to-pour product of its kind!



**DIRTY CARBURETOR?**  
Clean it quickly and inexpensively without dismantling. Blasts away upper cylinder carbon while cleaning carburetors.



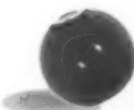
**CONTAMINATED FUEL SYSTEM?**  
Absorbs water. Cleans fuel tank and lines. Protects entire fuel system from rust and corrosion.



**LEAKY AUTOMATIC TRANSMISSION?**  
One-can treatment to recondition seals and stop leaks caused by drying, shrinking or hardening of seals.



**PROTECT AUTOMATIC TRANSMISSION, PREVENT LEAKS?**  
Maintains top automatic transmission performance. Conditions seals to prevent leaks.



**RUSTED NUTS, BOLTS? DRY RUBBER?**  
Loosens anything rusted. Stops squeaks in springs. Lubricates and restores life to rubber.



Shows you when and where  
to use each Wynn Product!



WYNN'S FRICTION PROOFING PRODUCTS STOP EXISTING TROUBLES PREVENT FUTURE TROUBLES!

**MOST DRAMATIC  
ADVERTISING  
IN HISTORY!**

- January 2 . . . THE SUGAR BOWL, NBC-TV
- March 18 . . . NATIONAL INVITATION BASKETBALL TOURNAMENT, NBC-TV
- March 25 . . . NATIONAL INVITATION BASKETBALL TOURNAMENT, NBC-TV
- May 6 . . . . . THE KENTUCKY DERBY, CBS-TV
- May 20 . . . . . THE PREAKNESS, CBS-TV
- June 3 . . . . . THE BELMONT STAKES, CBS-TV

**AND MORE SUPER SPORT SPECTACULARS ON THE WAY!**

*PLUS heavy concentration on NBC Radio's famed MONITOR—and high-frequency radio spots in major markets.*

**EXCITING ADVERTISING CREATING NEW CUSTOMERS  
FOR EVERY WYNN'S PRODUCT**

**DON'T MISS**

**BE SURE TO STOCK, DISPLAY—AND SELL—  
THE ENTIRE WYNN'S LINE!**

## FRICTION PROOFING



Better products, *faster*, from your National Seal jobber:

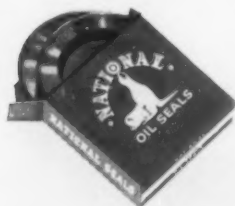


## 25 new makes rely on 1 name . . . NATIONAL

The number of standard sized and new compact U. S. cars has risen to twenty-five different models, and National Oil Seals are original equipment on all these 1961 cars. Why have these automobile makers chosen National? Because they've found that National Oil Seals do a better job of protecting bearings and brakes

from lubricant damage. And this is a good reason why you should replace pulled seals with new National seals. You'll be giving your customers the finest protection possible.

Ask your jobber about National Oil Seal service stocks to help make selling and servicing faster and more profitable for you.



### NATIONAL OIL SEALS

FEDERAL-MOGUL SERVICE

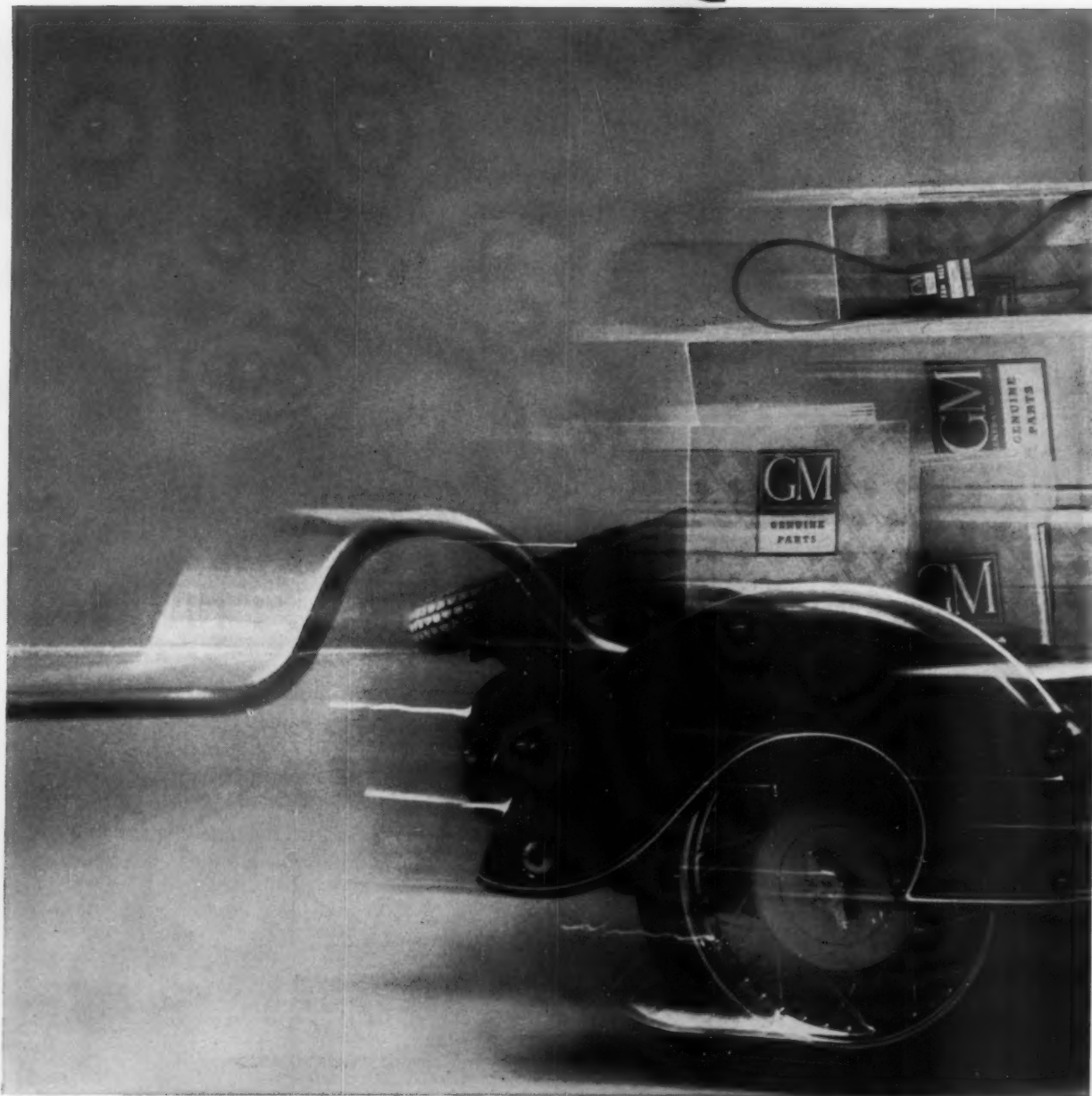
DIVISION OF FEDERAL-MOGUL-BOWER BEARINGS, INC. • DETROIT 13, MICHIGAN



*you get  
your  
Chevy parts*

# PDOQ!

*at your  
Chevrolet  
dealer's*





P.D.Q. means Parts Delivered Quick—and that's what happens when you put in an order with your Chevrolet dealer. He knows how to move fast on both parts he has on hand and those he must order. Besides stocking a wide range of Chevrolet car and truck parts, Chevy dealers are backed by 41 strategically located factory warehouses. (Another benefit for your business: By making your Chevrolet dealer your partner in service, you and your customers have the assurance of the reliability genuine Chevrolet parts are so famous for.) All of which means you'll give your customers consistently faster, better service to keep 'em happy and coming back. The next time you need parts for a Chevrolet, call your Chevy dealer. He's ready, willing and able to serve you. . . . Chevrolet Division of General Motors, Detroit 2, Michigan.



*there's no business like Chevrolet business . . . make your Chevy dealer your partner in service!*



Readers are invited to contribute to—

# SHOP TALK

## SUMP'N FOR "TIRED BLOOD"

Lynchburg, Tenn.

Dear Mr. Editor:

As you know, there are no sassafras trees on your Plot No. 5073 [one square foot at the Jack Daniel distillery], so we are sending you some of our roots.

We thought you might have trouble locating sassafras in Atlanta and we certainly wouldn't want you to get caught without sassafras tea when time comes to "clean out your blood."

It may be, Mr. Editor, that you rely on Warren County molasses or tender young poke sallet shoots as



A column of informal comments about the automotive trade and its problems.

## IDEAL HAS A HITCH TO FIT YOUR MARKET

It's sound business to sell trailer hitch equipment engineered to do a specific task. It's "Ideal" to do business with a factory who has over 30 years of experience and an established reputation for quality.

**TAILOR-MADE or UNIVERSAL?**



No. 505 Display Assortment  
Sells balls on sight. Colorful, self-contained unit.

**SELL THE LINE THAT HAS MERCHANDISING POWER!**



No. 507 Salesmaster Display  
Puts merchandise up where it belongs. Eye-catching.

IDEAL MFG. CO.

*Ideal*

Oskaloosa, Iowa

a springtime elixir. But down here in Moore County we agree with the old settlers that there's just nothing like sassafras tea for thinning out the blood to fight off the coming springtime lethargy.

Whether you believe in making sassafras tea by the short boil method (one stick in one pint cold water, brought to a boil and boiled only two or three minutes), Mr. Editor, or agree with Herb Fanning's grandmother that the best tea is made from the root after it has been boiled a couple of times (leave the root in the pot and add a new stick each day and boil a little longer each time), we know you'll keep the teapot at the boil now that you have a supply of fresh-dug Tennessee sassafras.

D. E. MORLOW,  
Secretary,  
Tennessee Squire Association

And just what more, pray tell, could you expect a dear friend to do for one as spring returns to the South?

## "EDEL" IS A BARBER

Guess the name of the barber who runs the shop in the luxurious Ford Motor Co. building in Dearborn where the top brass have their offices? It's Edsel.

Incidentally, hair cuts are by appointment (at \$1 plus a recommend-

Address any comments to: Southern Automotive Journal, 1760 Peachtree Road, N.W., Atlanta 9, Ga.



**1911 CASE**  
Originally manufactured  
in Muncie, Indiana

MAP COURTESY RAND McNALLY & COMPANY  
© RAND McNALLY & COMPANY 1961

New car or antique, the fastest way to turn out top-notch two-tone or overall paint jobs is with "SCOTCH" Brand Masking Tape. It goes on easier and sticks at a touch. Excellent adhesive qualities prevent paint from creeping under, give a sharp, clean separation every time. And you can depend on "SCOTCH" Brand Masking Tape to strip off clean and leave no jagged edge or messy adhesive residue. Order a stock now from your 3M supplier for better painting results.

**3M AUTOMOTIVE PRODUCTS GIVE THE  
RIGHT START TO A PERFECT FINISH.**

"SCOTCH" IS A REGISTERED TRADEMARK OF 3M CO., ST. PAUL 6, MINN.



**MINNESOTA MINING AND MANUFACTURING COMPANY**  
... WHERE RESEARCH IS THE KEY TO TOMORROW



ed tip of a buck about every second or third trip). The shop is reserved for the executives.

#### POSTHUMOUS BOUQUET

Florence, Ala.

Gentlemen:

I want to inform you of the death of Mr. Foster on Jan. 1, 1961. He'd been retired for over a year but still enjoyed your journal.

During the years he received the JOURNAL he used many hints and

suggestions from it and really enjoyed going through it again and again.

I'm sure he would like for me to thank you.

MRS. FRANK J. FOSTER,  
Route 5

#### OVER AND UP

A small foreign car won a battle recently with a high wind, only to go up seconds later in flames.

It happened this way:

The car's owner, Mrs. Carol Auten Franklin of Denison, Texas, was driving along Highway 75 when she attempted to turn off on a dirt road. The car struck a rough spot and a high gust of wind rolled it over and over until it came to rest back on its wheels.

The passengers, which included Mrs. Franklin's mother and small brother, scrambled out just before the car burst into flames and was destroyed. No one was injured.

#### STRICTLY FOR MURPHYS

The question, "Who took the overhauls out of Mrs. Murphy's Valiant?" began pelting the nation's Murphys — 500,000 of 'em — last month.

Subject of a national automobile ad campaign launched on the eve of St. Patrick's Day by Plymouth Division of Chrysler Corp., the Murphys were apprised that Valiant's one-piece welded Unibody "has cracked down on expensive overhauls."

An advance copy of the four-color ad featuring a green Valiant station wagon, along with a souvenir shamrock, was mailed to persons named Murphy from coast to coast from Murphy, N. C.

#### LEAVE IT TO A TEXAN!

R. O. Statum of Fort Worth, Texas, has discovered that the ignition key to his 1961 Rambler fits the front door of his house, which was built in 1941.

Leave it to a Texan to come up with this amazing million-in-one coincidence!

#### Checks Build Volume

(Continued from page 59)

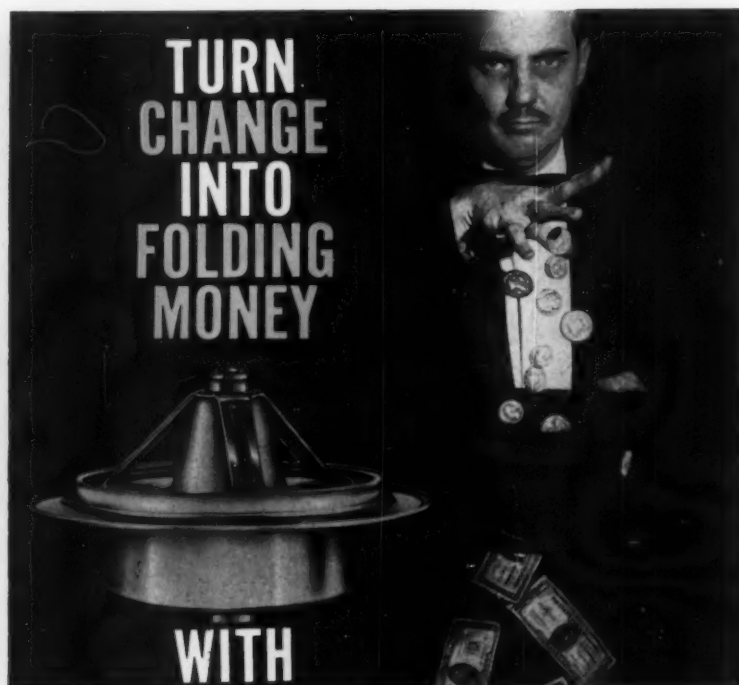
for a balancer five years ago and \$1,650 for an alignment machine 12 years ago. Our eight general mechanics handle these jobs.

No more space than approximately one stall is necessary, for our balancer is located right next to our alignment machine.

I would say that in seven out of ten cars you can sell an alignment when you sell a wheel balance, and the reverse. You can usually sell a balance when tires are crossed.

Another approach is mileage. Noting mileage, we inquire and recommend checking wheel balance. A good percentage of our balancing also comes off the grease rack.

The opportunity is there for wheel-balancing volume.



Sell your customers a complete changeover for smoother, cooler summer driving. Replace high-temperature thermostats with leak-proof, low-temp Summerstats by Autostat®. Exclusive "Power-Pill" sleeve-stat construction is self-cleaning, gives maximum flow for a cooler-running engine. *Change that stat . . . for a high money-per-minute profit that's hard to beat!*

**Robertshaw**

Robertshaw-Fulton Controls Co.



FULTON  
SYLPHON  
DIVISION

Knoxville 1, Tennessee



THEY'RE MADE FOR EACH OTHER

BOXED  
**KITS**  
OF FITTINGS  
NUTS, BOLTS



to install  
**MOTOR  
MOUNTS**



**FOR QUICK EASY INSTALLATION  
BETTER BUY BOTH**

A perfect combination to make motor mount installations less time consuming has just been created for YOU! Next time you buy replacement motor mounts be sure to ask for the handy "time-saver" installation kits. This is a separate box containing all the nuts, bolts, fittings, etc. to make your job easier, faster. Don't buy one without the other. You won't have to worry about shearing a bolt when removing a stubborn mount.

Call your favorite jobber.  
He stocks a complete line of  
Motor Mounts and Matching  
Installation Kits.

**TIME IS MONEY  
...SAVE IT!**  
BUY MOTOR MOUNTS  
AND INSTALLATION KITS  
IN COMBINATION



**DOAN MANUFACTURING**

A DIVISION OF ANCHOR INDUSTRIES, INC.  
1725 LONDON ROAD • CLEVELAND 12, OHIO

142A

## Safety-ize the Shop

(Continued from page 40)

fic. These lines should be installed so as to reduce to a minimum the danger of puncture or break.

Welding equipment must be kept in good repair. Use of this facility must be avoided above wood floors or near combustible materials or flammable liquids.

Even the most carefully planned and maintained shop can become a menace to safe working conditions when "good housekeeping" is not en-

forced. Congested aisles and work areas are dangerous. Haphazard stocking and storage, poor lighting and dirty or slippery floors increase the chances for serious accidents.

Accumulation of cartons, waste material and trash can and do contribute to fire possibilities. The use of sawdust and other oil absorbers for floor cleaning should not be permitted. An approved safety absorbent should be available.

Ventilation is an often-neglected factor in shop operations, particularly in cold weather. This is especially

true in small repair shops where carbon monoxide fumes are released by engine exhausts. Some heating devices, poorly vented, are dangerous sources of these deadly fumes. Serious illnesses—and some deaths—are attributed each year to improper ventilation.

Not all shops contain elevators, mechanical lifts, or hydraulic hoists, but those that do have the task of maintaining them in safe condition. Obviously all shaft openings should be guarded by locked gates. Further, there is a tendency for combustible trash to accumulate in elevator pits; this should be moved regularly to prevent serious conflagration.

All safety metal lugs and pins, wedges and other devices on car hoists should be usable and their proper use enforced at all times.

One last precaution—by no means least important:

Many accidents resulting in serious personal injuries and loss of property result directly from the physical condition of the workman himself. What is "safe" for one man may be dangerous for another.

Pre-existing physical defects—hernia, back weakness, heart trouble, eye defects, respiratory ailments and many others—can be primary causes for preventable accidents. Management can be appraised of these potential losses by an adequate program of pre-employment physical examinations. More profitable work assignments can be made—for both employer and employee—if physical defects are considered.

Some employees are careless—"accident prone" is the term applied—and careful checking of references as to previous employment may reveal these tendencies.

In conclusion, no two shops present identical problems, hazards or conditions. The foregoing is a general discussion applicable to most automotive shops. If special processes or products are involved, competent professional safety engineering services should be obtained.

## Simmerman Is Appointed Counsel for NADA

APPOINTMENT of Stephen S. Simmerman as general counsel for the National Automobile Dealers Association has been announced by James C. Moore, executive vice president.

A native of Wytheville, Va., Simmerman has been a member of NADA's legal staff for ten years. He is a graduate of American University.

# STILL THE CHAMPION

IN THE QUALITY CLASS IN THE COMPETITIVE CLASS

Contenders Come and Go, but for the Best in the Field  
STICK TO THE CHAMPION



## BLACK MAGIC for the QUALITY Buyer

A bodyman's champion! Top product in Swiss's "stable" of popular body menders, including Black Jack, Nu-Bond, Plasto-Bond and Tru-Flex. The pioneer black putty and cream hardener product that introduced amazing new achievements in body mending results. Widely imitated naturally, because of its freedom from fumes, odor, itch and 90% less dust... but in the minds of men who know body mending, there's only one champion... and that's BLACK MAGIC!

## BLACK JACK for the PRICE Buyer

Champion of the competitively priced brands! Far ahead of the field... good enough to outperform the market's next seven best established brands. Nearest thing to a duplicate of Black Magic you can find, but comparable results require a little more material, little more time, little more effort, and little more care. In its class—competing on price—it's the best buy on the market—it's the CHAMPION at the lowest price.



FREE!

3/4 lb. sample of either BLACK MAGIC or BLACK JACK, or both. Be sure to include your jobber's name and address with your request. Send for it today.

**SWISS LABORATORY, INC.**

One of America's largest independent manufacturers of Body and Wire Solders—  
CLEVELAND 14, OHIO

IT'S A PROFITABLE MARKET . . . GET YOUR SHARE WITH

# *Soundmaster*

## FOREIGN CAR MUFFLERS

One of every thirty cars on the road today is imported and represents a prospect for profitable exhaust system business. So cut yourself in on some increased earnings by looking and asking for the business from all prospects who drive imported cars. And to be certain of customer satisfaction, all Soundmaster imported mufflers are carefully checked by DeKoven engineers for fit, back pressure, sound levels, materials and quality of manufacture to meet the high standards required for all Soundmaster mufflers.

**ASK YOUR NAPA JOBBER FOR FOREIGN CAR MUFFLER SALES AIDS!**

DEKOVEN MANUFACTURING COMPANY • RACINE, WISCONSIN



Sell 'em  
**SPRING**  
 all summer  
 long!



Slant Coil  
 Contour-Yielding  
 Inner Structure

"Flat-Top"  
 No Sag . . .  
 No Snag  
 Inner Structure



Your customers can "sit on a breeze"—cool and refreshed as Spring itself—all summer long, with a Kool Kooshion ventilated seat cushion. With FIVE complete lines to choose from, there's a Kool Kooshion now for every size, pattern and price.

Big thing is: GET THE NEW, DISTINCTIVE KOOL KOOSHION RACK... KEEP IT STOCKED . . . AND KEEP IT UP FRONT.

Sturdy, easily set up, a tested "silent salesman," the new Kool Kooshion rack holds up to 26 cushions, sells for you even while you're busy.

For information on how to get your display rack FREE, ask your jobber or write:

**Kool Kooshion**  
 Manufacturing Co.

DYERSBURG, TENNESSEE  
 WORLD'S LARGEST MANUFACTURER OF VENTILATED SEAT CUSHIONS



Dear Bill,

You've got something there, in the matter of "forgotten equipment." A lot of money goes down the drain when a shop starts forgetting its equipment. And by "forgetting" I mean not only forgetting to maintain it, but forgetting to display it, promote it and use it.

One reason why we've been able to squeeze all the value out of the special equipment we've put into the shop is by means of discussions in our regular shop meetings. As many shop operators and mechanics can tell you, any piece of special equipment that gets in the shop without a proper introduction may be in line for a bad time and a dark corner.

As you know, the bull-of-the-woods has never been one to wait until everyone in town has proved they can do a job better and quicker with a new type of machine or tool before he would consider buying it. He says "second guessing" on progress isn't the high road to profitable operation or customer confidence.

On the other hand, he's been in the business long enough and has skinned his nose a few times on high-powered sales pitches that didn't quite work out when the hardware hit the shop, so he's not inclined to buy something that won't produce.

When he gets interested in a piece of equipment, he first calls in the mechanics working in that department where it is used and tries the idea on them. As you know, mechanics aren't quick to leap into anything new that may change their habits in performing their jobs. It's a lot easier to get their objections at this time and see if they are going to be convinced than to spring the machine on them cold and let them avoid using it.

If they can be shown and then agree it is a quicker and better way of doing their work, then it is put in service. At the next shop meeting one of the mechanics who uses it demonstrates its use to the whole force, and thus it is understood by everyone and they can explain it to interested customers. As you know, when any piece of equipment becomes a member of our shop family it gets its periodic maintenance and a record is kept on its service.

We've all visited other shops where equipment that we use regularly is neglected and may not be used at all. Sometimes we find their mechanics take a strange pleasure in "working around it" just to prove



## HIT THE JACKPOT

The returns will pour in when you have given satisfactory service to your customers... and for your business you'll hit the "jackpot" of customer satisfaction with the COMPLETE L & S Bearing line. Provide winning results thru service... dependability... and more profitable sales. Stock L & S Bearings for maximum returns!

# L&S BEARINGS

L & S BEARING CO. OKLAHOMA CITY, OKLAHOMA

they can get along without it—even if it takes more time. In other shops we found that the mechanic who knew about using it had left the company, and the others didn't know how it was operated. If the machine was a stranger to them, it certainly became a stranger to their customers, and it had no opportunity to sell its own service by its presence, or to make money by saving working time.

We feel that we pick up extra work every week simply because some casual drop-in customer was

impressed by the equipment he saw in the shop, either on a previous trip or on the spot. And since our method of paying the mechanic allows him to make more money by turning out quality work faster, he certainly isn't going to prove he can do without it by costing himself money, now is he?

It looks to me like we are going to have one of the biggest volume years in the shop's history. Here's wishing you the same, Pal.

Yrs,  
Ed.

## 1960 Tune-Up Charts Released by AEA

**C**OVERING 22 foreign-built cars, its 1960 Import Car Tune-Up Charts released by the Automotive Electric Association include 31 individual charts for each particular make and model of passenger car.

The individual charts contain exact factory specifications, original equipment part numbers and a wiring diagram booklet on the Alfa-Romeo, Austin, BMW, Borgward, DKW, Fiat, Jaguar, Mercedes, Metropolitan, MG, Morris, Opel, Peugeot, Porsche, Renault, SAAB, Simca, Taunus, Triumph, Vauxhall, Volkswagen and Volvo. The price is \$3, plus shipping charges. Interested persons should write directly to AEA at 16223 Meyers Road, Detroit 35, Mich.

## Porta of Studebaker Joins Associates

**A.** J. PORTA, executive vice president of the Studebaker-Packard Corp., has been elected vice president—financial affairs of Associates Investment Co., South Bend, Ind., Oliver C. Carmichael, Jr., Associates board chairman, announced.

Porta's election concludes over 35 years of service with Studebaker. He will handle financial operations for Associates in relations with insurance companies, banks and investment analysts along with directing the activities of the treasurer's department.

A native of Fort Smith, Ark., Porta has been in the automobile business since his graduation from Notre Dame University in 1925.

## Carelessness Costs Cash (Continued from page 45)

the shop doesn't have to drain a vehicle gas tank to make some form of repair. Quite often the gas is drained into an open container—usually some type of tub—and the tub full of gasoline is allowed to remain open on the floor until the repairs are completed.

We recall just such an incident where a spark from a welding job, which was being done several stalls away, ignited the gasoline and considerable fire damage was caused.

Gasoline should always be kept in a closed container. Gasoline should never be used as a cleaning solvent.

Garage work is rather hazardous at best, but we can make it safer by establishing and enforcing a few simple common sense safety rules.

# ACME JOBBER DISPLAY BOARD

**IT'S  
NEW!**



**This NEW  
ACME  
"Silent  
Salesman"  
#3000  
will Sell  
for You...  
will bring  
You more  
SALES...  
more  
PROFITS!**

SEND FOR COMPLETE LITERATURE

**ACME AIR APPLIANCE Co., Inc.**

205 NEWMAN STREET • HACKENSACK, N. J.

**ACME**  
*for Accuracy*  
SINCE 1915

Get more power, more strength with

# Toledo Steel pistons

Toledo Steel offers you the most complete piston line in the industry. Every piston is of the highest quality, balanced and matched for weight control to original equipment specifications. Be sure your engine overhauls are the finest possible . . . install Toledo Steel pistons, pins and sleeve assemblies.

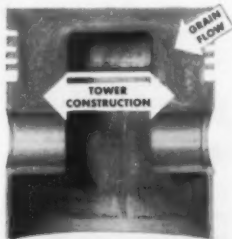
NEW

**Toledo Steel**

FORGED ALUMINUM PISTON

## POWER FORGED

**UP TO 70% STRONGER** than conventional cast pistons without added weight! The new Powerforged is forged, not cast. It's tin plated for scuff resistance and better break-in qualities. Power forging produces a grain flow for greater strength, better heat dissipation, improved ring groove wear and longer life. "Tower" construction adds extra strength in head and piston pin bosses, permits more flexibility in skirt area.



### STEEL-BELTED PISTON

An aluminum piston for heavy duty service that thoroughly controls thermal expansion for more power and strength, better heat, wear and oil control.



### POWERGROOVE PISTON

Features all of the advantages of the Steel-belted piston, plus top groove insert for even longer, more dependable heavy duty service.



**TOLEDO STEEL PRODUCTS**

*Division of Thompson Ramo Wooldridge Inc.*

6402 CEDAR AVENUE · CLEVELAND 3, OHIO

WORLD'S FINEST PARTS . . . WORLD'S FINEST SERVICE

## Make Seats Safe, Too

(Continued from page 65)

gear shaft and the clutch.

3.—Remove the regulator housing cover and remove the nuts retaining the driven gears to the screws.

4.—To remove the screw assemblies, support the regulator housing on the rear face, place a wood block on the threaded end of the screw and press the rear bearing out of the housing. With the rear bearing removed, the vertical and horizontal screw assemblies, regulator driven

gear and thrust needle bearings and races are loose items.

Power seat mechanism inspection:

1.—Clean all parts and check the screw assemblies for free movement of the ball nut assemblies. Make certain the nut moves from one stop to the other without binding or roughness.

2.—Check the regulator housing for cracks.

3.—Check the regulator driven gear and worm gear for worn or chipped teeth.

4.—Check the thrust needle bear-

ings for pitting and looseness.

5.—Check each screw, front and rear bearing for roughness or loose fit. If a front bearing requires replacement, support the housing in the bearing area, and with a press remove the bearing. The front bearing will not require removal if the regulator housing is to be replaced, since the replacement housing contains front bearings.

Power seat mechanism assembly:

1.—If the screw front bearing is to be installed, support the housing and press in the bearing.

2.—Install a thrust needle bearing, with a bearing race (thick) on each side, onto the threaded end of each screw assembly. Position each screw assembly in the regulator housing and install the rear bearing.

3.—Install the bearing race (thick), thrust needle bearing, bearing race (thin), regulator driven gear and retaining nut on each screw assembly. Torque the retaining nuts to 30-35 ft. lbs. and stake each nut in three places.

4.—Pack the gear housing with lubricant (B8A-19578-A) and install the cover.

5.—Install the clutch and the worm gear shaft.

6.—Install the coupling and motor.

7.—Install the yoke, retaining pin, solenoid shaft and both solenoids.

8.—Apply Lubriplate to the vertical and horizontal screw assemblies.

Power seat mechanism installation:

1.—Place the regulator assembly on the seat track assembly and connect the equalizer bar links to the ball nuts.

2.—Retain the regulator to the seat track with the clevis pins.

3.—Connect the wires at the relay, motor and solenoids (Fig. 6).

4.—Install the seat track assembly to the seat assembly. Connect the seat switch wires at the left seat track.

5.—Place the assembly in the car and install the retaining bolts.

6.—Connect the wires beneath the center of the seat assembly.

## Dodge Fills Charlotte And Dallas Positions

**A**PPPOINTMENT of Richard D. McLaughlin as regional manager of Dodge Division's Dallas region, succeeding Dan J. Kraft, who was named manager of the Charlotte, N. C., region, has been announced by John B. Naughton, general sales manager.

McLaughlin, who joined Dodge in 1953, had been regional sales manager at Atlanta.

## TO HELP YOU SELL MORE MAC'S IN 1961



*"Now get the picture, Emile. It's opening day at Santa Anita...29,000 cars in the parking lot... and there you are with your bottles of rusting agent. And there I am with 29,000 cans of Mac's No. 13\*. We'll clean up."*

\*Mac's No. 13 stops rust in its tracks. Makes a cooling system run clear for a whole year. You can get it at just about any service station.



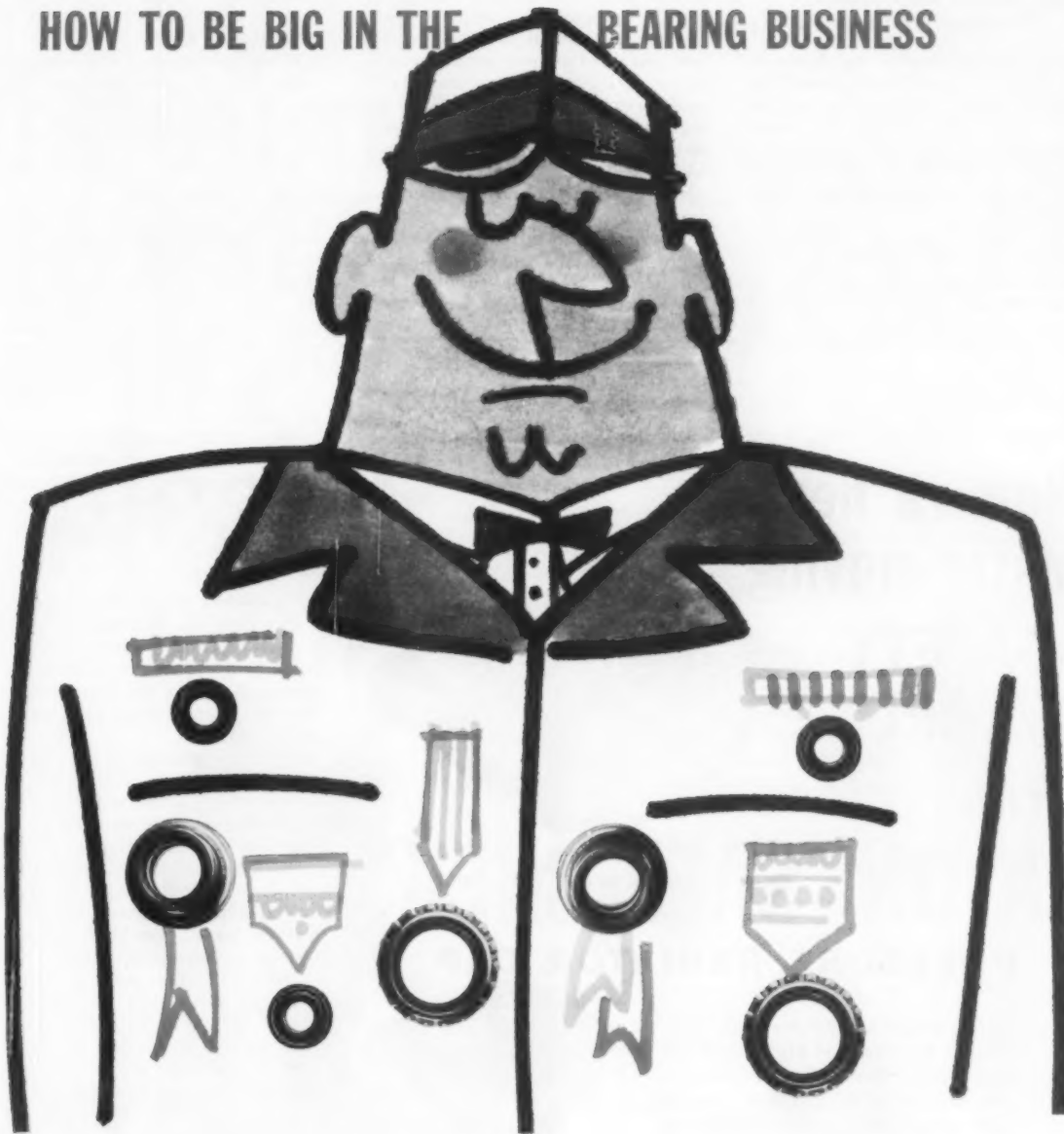
A whole series of sales-making ads like this one will be telling the story of Mac's famous radiator products (MAC'S NO. 13, SEALER & STOP LEAK, COOLING SYSTEM CLEANSER) month after month in:

**TRUE • PLAYBOY • FIELD & STREAM •  
SPORTS AFIELD • OUTDOOR LIFE •  
MOTOR TREND • POPULAR MECHANICS •  
POPULAR SCIENCE . . . men's magazines that**

*reach your best customers regularly. Watch for them!*



## HOW TO BE BIG IN THE BEARING BUSINESS



New Departure and Hyatt make it easy and profitable for you to be the wheel bearing expert in your neighborhood. Here's all you do! Remind customers that for safe driving, front wheel bearings should be serviced every 10,000 miles; keep an assortment of New Departure Ball Bearings and Hyatt Tapered Roller Bearings on hand so you will have the bearings you need for replacements on any car . . . millions of cars are factory-equipped with them.

No special equipment or training is required for bearing installation. And this is a good time to inspect and sell new grease seals, brake parts, wheel alignment and balancing, shocks, suspension parts and tires.

Your United Motors Service supplier has New Departure and Hyatt wheel bearing assortments that provide bearings for all popular requirements. You can start in the front wheel bearing business with one of these assortments with a minimum initial stock investment. . . . Call your United Motors Service supplier today.

**HYATT**  **NEW DEPARTURE** *quality bearings distributed through*



## Belts Make Comeback

(Continued from page 43)

Dallas, safety director for Automotive Booster Clubs International. His release added: "Automotive sources said the belt attachments (belts themselves) would cost from \$3 to \$5 each as compared with costs of close to \$20 for installation in most vehicles now."

"Automotive sources" referred to by Beard may be slightly over-optimistic in respect to prices if the \$3 to \$5 refers to total cost of one seat

belt in a '62 model. Spurred by demand, production might reach heights that would drop prices that low, but most owners would want to know something about durability of such-priced belts. Furthermore, installation costs would be the same next year as now on models previous to '62.

Installation has been another deterrent to seat belt sales, especially in service stations. In most stations there is but one mechanic and he specializes on motor tune-up and brake work, generally lacks three

qualifications when it comes to installing seat belts—tools, time and inclination.

When informed of the announcement that car manufacturers would provide "installation aids" on '62 models, one service station owner exclaimed:

"That would be wonderful! Then I could sell some belts.

"You know how it is," he continued. "I have one mechanic on motor tune-up and brakes. For installation of seat belts he is out. In the rest of my crew there isn't enough intelligence to turn over to one of them an expensive car and let him be boring holes in it. I wouldn't even let one of my gas pumpers put seat belts in my car.

"So I finally gave up on seat belts. I had a display for a while, but no requests and, further, that installation problem. With competition and other conditions what they are in this business and profits down, about all we do now is pump gas."

### Dealer's Job Usually Easier

In a new-car dealership, installation isn't such a problem. Usually, if there is a seat cover and trim department, one of the men from that department, or a body shop man, installs seat belts.

A service manager who explained his policy on installation quoted flat rates on installation as follows: \$3.60 for each front seat belt, \$3 for each rear seat belt. He estimates that "installation aids" on '62 models will reduce installation costs by at least 50%, perhaps as much as \$2, thus making installation \$1.60, for example, on each front seat belt.

The way this service manager expects '62 models to come out is with all the frame holes—four for each passenger—drilled at the factory, and perhaps rubber-plug push-outs in floorboard access holes.

There is still another deterrent to seat belt sales. Perhaps it is the most effective deterrent of all and it is easily found in quantity in the new-car sales departments of dealerships.

It wouldn't be so bad if the new-car salesman, about to get a signature on that order, would delay the transaction long enough to say: "Well, I guess you don't want to put in seat belts too, do you?"

But it's worse than that. This observer has encountered many new-car salesmen who are scornful of seat belts. Not only do they refrain from trying to sell belts. This observer knows many unsell seat belts when mentioned by the car buyer, pointing out: "If your car rolls over and catches fire, you can't get loose."

But, to tell the truth, you can't

# Now—a new, faster-moving

## SAFETY CAP!

## THE EATON "SAFE-CHEK" PRESSURE RADIATOR CAP

Greater safety appeal makes every car owner want it! Faster turnover and higher unit sale mean more profit. Here's the new way to really safe radiator checking. Just a quick turn of the release opens a valve permitting pressurized steam or boiling water to vent safely through the overflow. Valve stays open without attention while pressure escapes. Cap can then be safely removed. A turn back closes the valve and completely seals in the pressure again. No buttons to hold down. No levers to damage hood.

Cash in on this new fast-moving Eaton profit-maker. See your jobber or write direct.

THERMOSTATS • GAS TANK CAPS • LOCKING CAPS  
BREATHING CAPS • PRESSURE CAPS

## EATON MANUFACTURING COMPANY

STAMPING DIVISION • CLEVELAND 10, OHIO

IN CANADA: Eaton Automotive Canada Limited • London, Ontario



16-CAP  
DISPLAY ASSORTMENT  
SERVICES ALL  
LATE MODEL CARS WITH  
HIGH PRESSURE SYSTEMS

Order yours  
today!



# try the piston ring set\* that's a pleasure to install

\*

## EACH MUSKEGON ENGINE-DATED

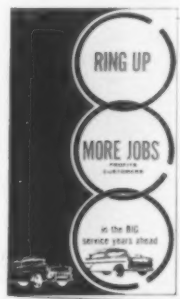
piston ring set consists of a carefully coordinated arrangement of compression and oil rings... the right type ring for each groove to assure maximum performance in a particular engine. The result, as voiced by the Engineers, is that "The engine likes the rings." You can be sure that an Engine-Dated set will give the vehicle owner top-notch performance, that's why they're a pleasure to install.

Ring job costs are reduced too, because Muskegon takes inflation out of piston ring pricing—passes along to you important savings resulting from economies in Muskegon's distributing plan.

Packaged attractively with color-coded inner containers to guide you in getting the right ring in the right groove. Complete instructions to assure entire satisfaction every time!

JUST TRY THEM ONCE AND YOU'LL SEE WHY "ENGINE-DATED" SETS ARE EXCITING TO SELL... A PLEASURE TO INSTALL.

Request This Fact-Filled Booklet. Six easy-to-read pages tell about the "Booming Engine Repair Business Ahead" and how "Re-Ringing Leads to Related Sales." Ask your Muskegon jobber for a FREE copy or write us direct!



PLANTS AT: MUSKEGON  
SPARTA • CHICAGO

The industry's source—original equipment and replacement—of Piston Rings and Transmission Parts



much blame the salesman. As one dealership spokesman noted, the dealer puts pressure on the sales manager to sell cars, the sales manager puts pressure on salesmen and all the latter have to do is make a quota and a living. Said the spokesman:

"Consider the predicament of the salesman. He's not only trying to sell a new car. Factory-installed accessories valued at \$1,000 to \$1,500 are also involved. Should the salesman run the risk of queering his deal for a \$20 set of seat belts?"

Well, no. However, sales personnel of car dealerships might abandon the practice of passing the buck to the public. Ask anyone in new-car sales what's wrong with seat belt sales and chances are the answer is public apathy and indifference.

The anti-seat-belt attitude in new-car sales extends to sales managers and even higher, as shall be seen.

SAJ interviewed some new-car sales managers, inquiring as to what was wrong with seat belt sales, and there was an interesting lack of variation in the answers. One sales



D. A. Brown, new executive director of Automotive Air Conditioning Association, Dallas, Texas, is also vice president and general manager of A.R.A. Mfg. Co., Grand Prairie, Texas. The association is comprised of independent manufacturers of automobile air conditioners of the hang-on or trunk type.

# MAKE MORE MONEY

## WITH LEMPCO

### "ADVANCE DESIGN" SHOP EQUIPMENT

### "ORIGINAL QUALITY" AUTO & TRACTOR PARTS



Model 8073  
"Auto-Hydrodyne"



Model 716  
"Dual-Matic"



Model 451  
Track Pin Press



Model 518  
Crankshaft Grinder

**LEMPCO PRODUCTS, INC., BEDFORD, OHIO**

Automatic transmission testers, brake drum lathes, crankshaft grinders, track pin presses, automatic wet surface grinders, electric and hydraulic presses, reamers.

**LEMPCO AUTOMOTIVE, INC., BEDFORD, O.**

Automotive parts, including automatic transmission parts, power steering parts and kits, gears, axles, universal joints, etc.

**TRACTOR DIVISION  
LEMPCO AUTOMOTIVE, INC.**

Crawler track parts, including pins, bushings, grouser rollers, grouser steel, track bolts and nuts, shafts, track group assemblies, etc.



**ASK YOUR LEMPCO MAN**



For over 40 years,  
a leading builder of  
Machine Tools

**WRITE FOR CATALOGS AND PRICES**

manager explained:

"Oh, we have some seat belt sales, to fleet accounts, that is. But in individual car sales it seems the salesmen simply forget to mention seat belts. They try to let the customer have what he wants in his car without trying to sell him seat belts. The public just isn't safety-minded, including me, since I don't have belts in my car."

Another said seat belts "are always in the way. I know they are good, but I don't use them myself."

As has been widely publicized, one car manufacturer made an apparently sincere effort to sell seat belts through factory dealerships at factory cost. If a report on the results of this campaign has been released, it was unavailable at this writing.

That program has been called a fine, public-spirited gesture and was widely applauded. But there doesn't seem to be much doubt that it failed to sell a large number of seat belts, for a good many dealers didn't like the idea. One of several questioned passed some uncomplimentary remarks, concluding with:

"Who is he to set the prices on our merchandise?"

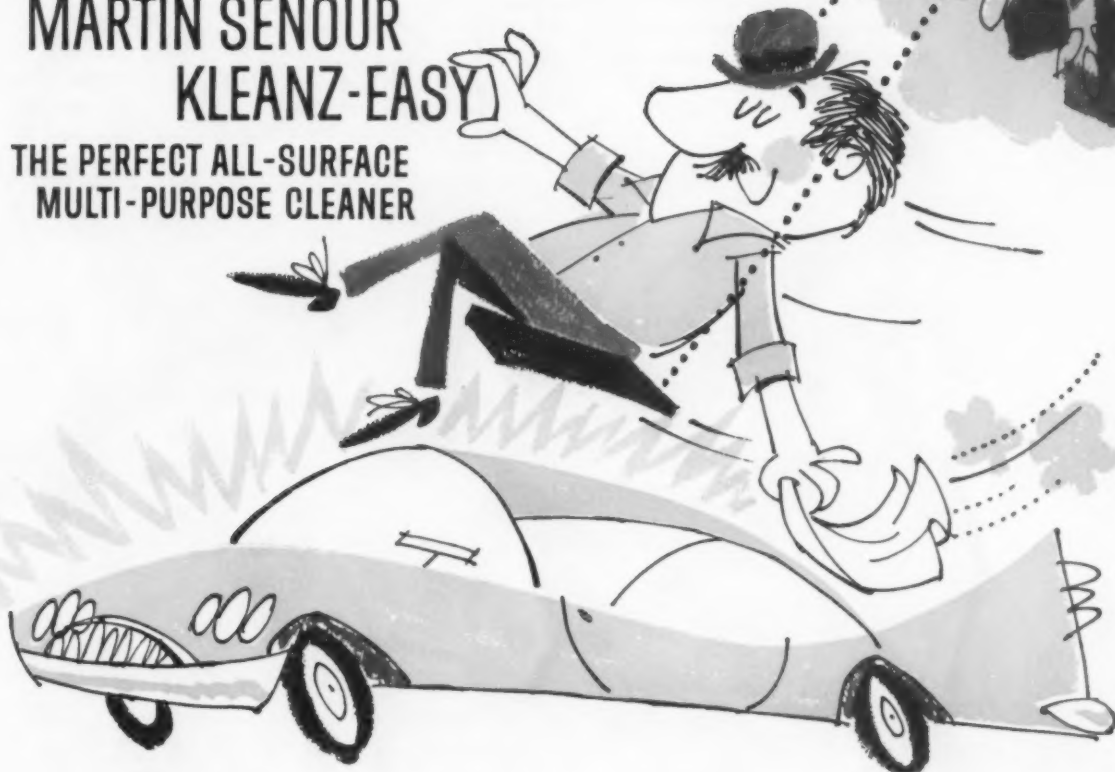
As of now there is less apathy and indifference on the part of the public than there is actual opposition on the part of new-car sales people.

To get seat belts in most car dealerships, the car buyer has to ask for them. But this is subject to change by three factors—improved seat belt design, increased public demand and a car factory program participated in by all manufacturers.



# MARTIN SENOUR KLEANZ-EASY

THE PERFECT ALL-SURFACE  
MULTI-PURPOSE CLEANER



Kleanz-Easy is the amazing automatic cleaner for acrylics, enamel or lacquer finishes that (1) removes grease, oil, road tar and dirt as well as (2) wax and most silicone polishes. Its stronger solvents give a deeper, quicker cleaning action, yet Kleanz-Easy takes it easy on user's hands. Quick-drying Kleanz-Easy wipes off without leaving residue, lessens sanding time...assures better adhesion. For a fast, thorough, all-purpose surface cleaner rely on shop-proven Martin Senour No. 6383 Kleanz-Easy.

Choose Martin Senour products with full confidence. They're available exclusively at N.A.P.A. jobbers throughout the country.

And ask your N.A.P.A. jobber about the Martin Senour Model A360 5 Gallon Pump for use with all round 5-gallon steel containers.

Eliminates lifting heavy pails, eliminates waste—won't rust or corrode.

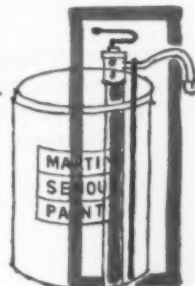


Martin-Senour...World's Leading Producer of "Shop Engineered" Products!

AUTOMOTIVE DIVISION

**THE MARTIN-SENOUR COMPANY**

2500 S. Senour Avenue • Chicago 8, Illinois



**FIRST! then another FIRST! another...and another...**

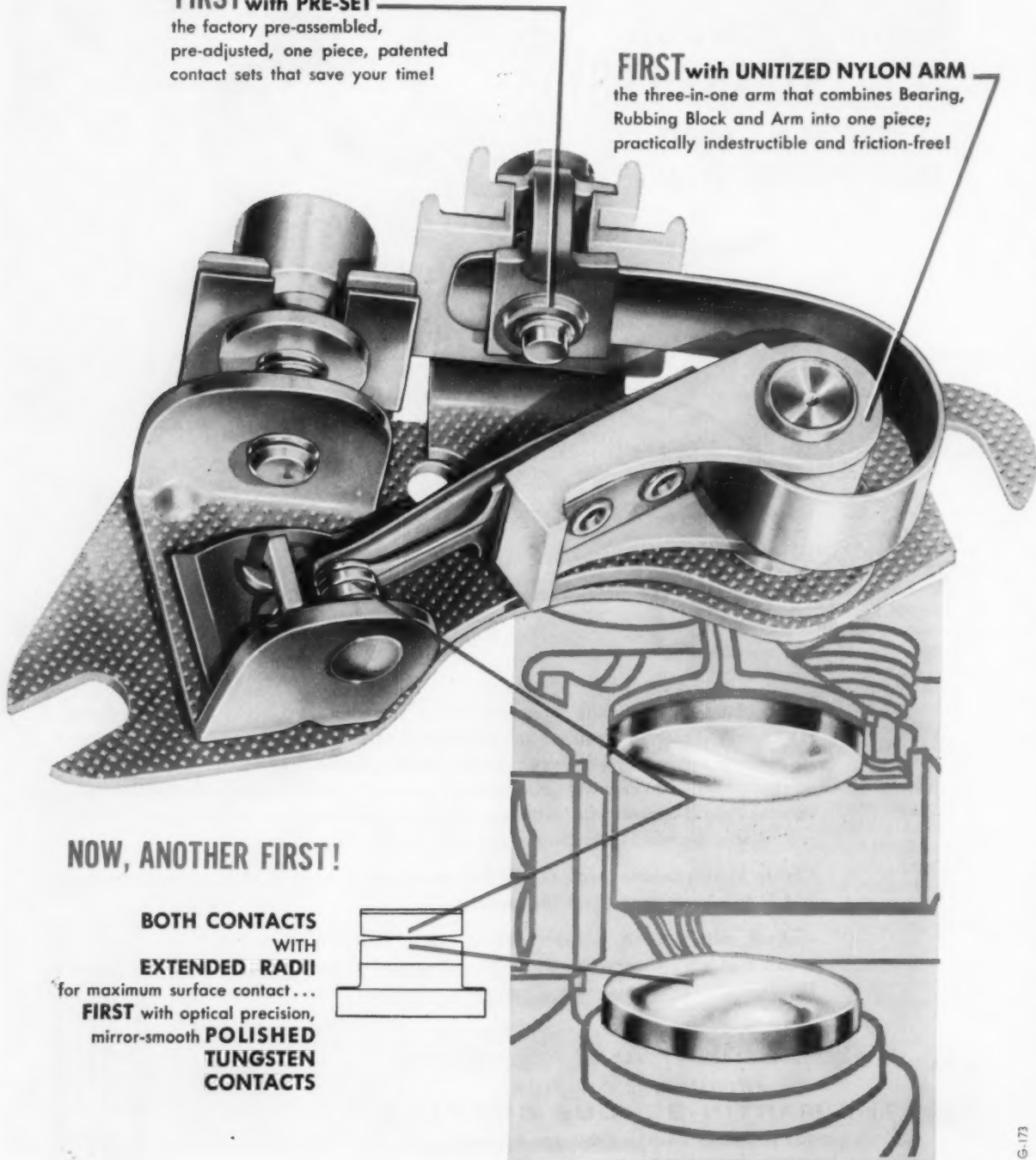
# NO ONE COMPARES WITH FILKO

**FIRST** with PRE-SET

the factory pre-assembled,  
pre-adjusted, one piece, patented  
contact sets that save your time!

**FIRST** with UNITIZED NYLON ARM

the three-in-one arm that combines Bearing,  
Rubbing Block and Arm into one piece;  
practically indestructible and friction-free!

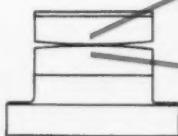


**NOW, ANOTHER FIRST!**

**BOTH CONTACTS  
WITH  
EXTENDED RADII**

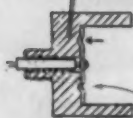
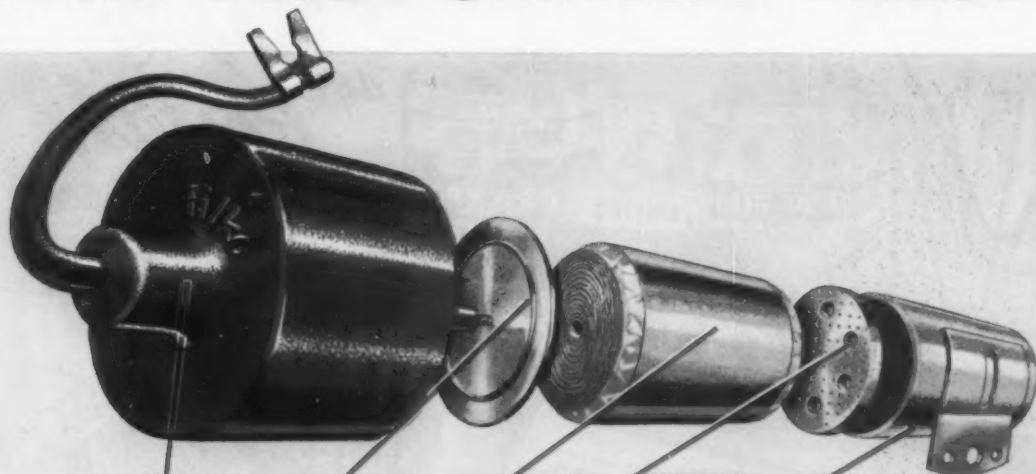
for maximum surface contact...

**FIRST** with optical precision,  
mirror-smooth **POLISHED  
TUNGSTEN  
CONTACTS**



and another!

# ...IN PACE SETTING FIRSTS!



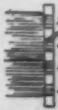
NEW THICK WALL NECK



NEW CIRCLE CONTACT



SUPERIOR CAPSULE DESIGN double layers of insulating paper... and aluminum foil!



NEW GROUND PLATE DISC



NEW STEEL CASE

NEW 100% DUAL ACTION CONTACT DISCS

## FIRST

with **SOMETHING TRULY NEW** in **CONDENSERS!**

See the first significant advance in condenser design in twenty years... See this Pull-Apart model at your **FILKO WHOLESALE!**



THESE ARE BUT A FEW OUTSTANDING FIRSTS THAT HAVE MADE FILKO THE LEADERSHIP IGNITION LINE FOR CARS, TRUCKS, TRACTORS, MARINE AND FRACTIONAL H.P. ENGINES

*the Crown Jewels of Ignition*

- Leadership in Engineering
- Leadership in Pricing Policies
- Leadership in Merchandising for Dealers
- They all add up to **MORE PROFITS FOR YOU!**

**F. & B. MFG. CO., 4248 W. Chicago Ave., Chicago 51, Ill.**  
20 Public Warehouse facilities serving all leading trade areas.

# CHECK **UNITED** BRAKE FLUID

*for Safety  
and Profits!*

**BRAKE FLUID ENGINEERING TESTS**

	UNITED BRAKE FLUID	COMPETITIVE BRANDS			
		A	B	C	D
HIGH BOILING POINT 400° F.	✓		✓		✓
FREE FLOW @ SUB ZERO-80° F.	✓		✓		✓
RUBBER PARTS LUBRICATION	✓		✓		✓
METAL PARTS PROTECTION	✓		✓		✓
MISCIBILITY (with other approved Fluids)	✓		✓		✓
RUBBER PRESERVATION	✓		✓		✓
WATER ABSORPTION CAPACITY-8%	✓		✓		✓

✓ S.A.E. APPROVED ✓ MEETS ALL FEDERAL SPECIFICATIONS ✓ CERTIFIED IN ALL STATES REQUIRING REGISTRATION ✓ BACKED BY THE NAPA SEAL OF QUALITY

**ECHLIN** *Ignition* **UNITED** *Brake Parts*

THE ECHLIN MANUFACTURING COMPANY • BRANFORD, CONN.

UNITED PARTS DIVISION • CHICAGO, ILL.

ECHLIN - UNITED OF CANADA, LTD. • TORONTO

IGNITION & ELECTRICAL PARTS • HYDRAULIC & POWER BRAKE PARTS • BRAKE CABLES • BRAKE FLUID • SPEEDOMETER CABLES



# AUTO PARTS ARRIVE SAME DAY!



Got a shipment going hundreds of miles? Get it out by 9 A.M.... it arrives the same day! Got a shipment going about 50 miles? Ship it out around 9 A.M.... it's there by noon!

Whatever the destination of your shipment, chances are, a Greyhound is going there anyway...*right to the center of town.* Greyhound travels *over a million miles a day!* No other public transportation goes to so many places—so often.

You can ship anytime. Your packages go on regular Greyhound passenger buses. Greyhound Package Express operates twenty-four hours a day...seven days a week...*including weekends and holidays.* What's more, you can send C.O.D., Collect, Prepaid...or open a charge account.

## CALL YOUR LOCAL GREYHOUND BUS TERMINAL TODAY...OR MAIL THIS CONVENIENT COUPON TO:

GREYHOUND PACKAGE EXPRESS  
Dept. D-39, 140 S. Dearborn St., Chicago 3, Illinois

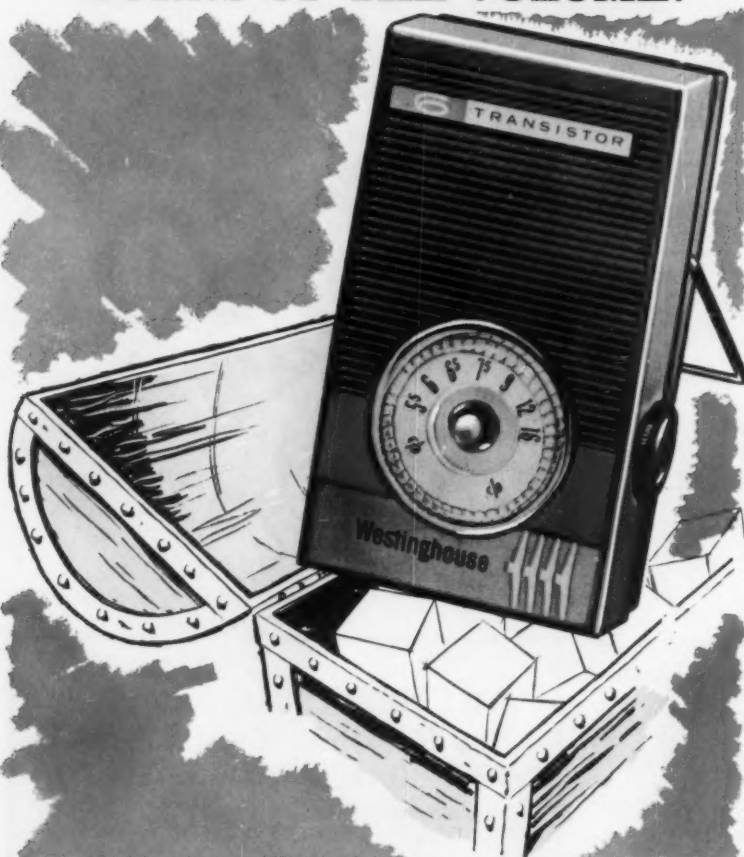
Gentlemen: Please send us complete information on Greyhound Package Express service...including rates and routes. We understand that our company assumes no cost or obligation.

NAME \_\_\_\_\_ TITLE \_\_\_\_\_  
COMPANY \_\_\_\_\_  
ADDRESS \_\_\_\_\_ PHONE \_\_\_\_\_  
CITY \_\_\_\_\_ ZONE \_\_\_\_\_ STATE \_\_\_\_\_

## IT'S THERE IN HOURS...AND COSTS YOU LESS!



## LEE FILTER 'TREASURAMA' TURNS UP THE VOLUME!



AT LAST...a promotion that gives you true value. LEE's 'Treasurama' TR-27 assortment includes 27 of the most popular LEE dual-action filters *plus* a new Westinghouse (made in U.S.A.) six-transistor portable radio (and batteries packed right in the carton)—for only \$44.95\*. The radio alone retails for \$34.95\*, so you know the LEE 'Treasurama' is really profitable. Supplies are limited. Better tune in on this volume-builder today. See your LEE Distributor or write for more details.

\*SUGGESTED PRICES

© LEE FILTER CORPORATION, EDISON, NEW JERSEY  
In Canada: 267 Niagara St., Toronto, Ontario



Buick's new luxury car, the Skylark, is a two-door sports coupe which introduces as standard equipment a new 185hp engine, the Skylark 185, an advanced and more-powerful version of the 324-pound aluminum V-8 designed and built by Buick and presented in the 1961 line last fall. The high-performance model, available only as a sports coupe, is fitted with 49"-wide doors for easy entry. It is 188" long, is mounted on a 112" wheelbase and weighs 2,700 pounds—some 1,600 pounds less than conventional-size 1961 Buicks. Front bucket seats and a white fabric covering for the metal top are available as optional equipment. Introduced simultaneously with the Skylark will be a new model in the Special series—a two-door coupe with a 155hp, aluminum V-8 engine—which will be the lowest-priced car in the 1961 Buick line.

## TVA's Big-Time Shop

(Continued from page 61)

staffers. It has retractable, flexible ducts from the overhead exhaust ventilation system which carries off carbon monoxide fumes. The tubes drop down and are easily attached to the vehicle.

5.—Modern tune-up and engine test equipment, including oscilloscope used for trouble-shooting and preventive maintenance service.

6.—Electronic equipment used to balance wheels on cars and light trucks.

7.—Front-end alignment equipment is part of new-car service and preventive maintenance program.

8.—Washing and steam cleaning done in a 15x80-foot service bay extending the full length of the shop. Overhead ventilation carries away steam fumes. Engines and chassis are steam cleaned, when needed, before P.M. inspections and major repairs or overhaul.

9.—Separate modern paint shop in a corner of the garage has forced air ventilation and electrical installations in accord with the code requirements for paint work.

10.—Intercom system to talk to



## Automotive **AIR CONDITIONERS** give your customers *original equipment quality* at low, low cost!

When you handle the famous Eaton Air Conditioners, you can offer your prospects all the customized features that they expect to get only in expensive built-in units.

Eaton Air Conditioners are made and warranted by Eaton Manufacturing Company, pioneer manufacturer of automotive air conditioners and components for original equipment installation. The name "Eaton" helps you sell and helps keep customers sold.

In addition to superior quality and low price, Eaton backs your selling effort with local advertising and sales helps.

### **NEW 1961 COLOR**

Furnished in beautiful Empire Gray, or units can be easily painted to match car interiors.

### **LIBERAL CO-OP ADVERTISING PLAN**

Advertising allowance for local media — newspaper, radio, outdoor boards. Newspaper mats, radio transcriptions, and outdoor paper furnished free.

### **SALES PROMOTION MATERIALS**

Dealer selling aids include a colorful, attention-getting counter display and free descriptive hand-out folders.

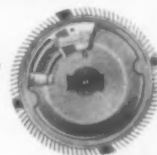
### **NEW 12-MONTH OR 12,000 MILE WARRANTY**

A big selling point. We believe this is one of the most liberal warranty agreements in the industry!

### **CHECK THESE SALE-CLOSING FEATURES:**

- Modern Custom Styling
- Compact Space-Saving Design
- Fast Cooling
- Automatic Temperature Control
- Manual Control for Extra Cooling
- Wide Angle Air Distribution
- Foot-Level Cooling
- Variable Air Flow
- Easy Under-Hood Installation

### **EATON Tempatrol® Fan Drive**



**Thermostatically Controlled  
Fan Drive Increases Usable H.P.—  
Reduces Fan Noise.**

All air conditioners use some engine horsepower. By automatically cutting out the fan when engine cooling is not needed, the Eaton Tempatrol® Drive saves horsepower to offset that used by the air conditioner. Available with Eaton Air Conditioners as an optional extra cost accessory, the Tempatrol® Drive is an important selling feature.

*For Complete  
Information  
Write, Wire, or Phone:*

**LYNN & BROOKS**  
3055 WILSHIRE BLVD.  
LOS ANGELES 5, CAL

**LYNN & HEMPHILL**  
2116 N. PEARL ST.  
DALLAS 4, TEXAS

**AARON & BELL**  
3272 PEACHTREE RD., N.E.  
ATLANTA 5, GEORGIA

**ROBERT O. DICKEY COMPANY**  
3205 WEST 86th STREET  
KANSAS CITY 15, MISSOURI

**EATON MANUFACTURING COMPANY • Heater Division • Cleveland 4, Ohio**

## FOR THE DISCRIMINATING USER



### CLAW-PLAST BLACK ARMOR Flexible PLASTIC PUTTY FILLER

For the man who is concerned about doing a quality job . . . yet likes to keep labor costs down, here is the ultimate in patching compounds.



#### QUALITY FEATURES:

- Permanently Flexible!
- Fast-Curing!
- No Shrinkage or Embrittlement on Aging!
- No Fibre-Glass!
- Super Adhesion!
- Unexcelled Adhesion, Impact and Shock Resistance!
- Super-Smooth . . . Easy Spreading!
- Easy Sanding!
- Deodorizer Added!
- No Soft-Spots, Pock-Marks, Pinholes or Blisters!
- Long "Sta-Fresh" Shelf Life . . . Code-Dated!
- Very Low-Dust!



Also Ask Your Jobber For:

### LOW-DUST SEMIFLEX . .

GREY COLOR

UNCONDITIONALLY GUARANTEED  
JOBBER AND DISTRIBUTOR INQUIRIES INVITED

### CLAW-PLAST

Mfg'd by H. CLAUSEN & CO., INC.

Dept. SAJ, 1055 King George Rd., Fords, N. J., P. O. Box 24

mechanics. Each of nine master stations has two-way communication with all the others.

11.—Besides pushbuttons at the doors, there are remote control buttons at the foreman's desk. One button is for up, one for down and one for stop.

12.—Near the foreman's desk, too, is a booth built for telephone use without disturbance.

13.—Electrical panel boxes are all neatly arranged along walls near the foreman's desk. On each is plainly lettered just what electrical outlets it serves.

14.—The office of the garage supervisor, Johnnie Chenoweth, has windows so that he can see shop operations and the adjoining stock room.

15.—Machine shop equipment is all conveniently situated and concentrated in one corner of the shop area. That saves time and speeds work.

16.—In the first floor stock room, parts bins and shelving are conveniently situated and systematically arranged for fast service to mechanics.

#### Filling Tanks Effectively

17.—From either the first or second floor of the stock room, underground tanks can be filled with motor oil, varsol and water-anti-freeze mix.

18.—A service island outside the front of the garage has gasoline and diesel fuel dispensing pedestals. Also a cabinet in the center housing the terminal faucets for the motor oil, varsol and water-anti-freeze mix, which are distributed by air pressure from the underground tanks.

19.—There is also an underground tank to catch oil and gear lubricant drained out of vehicles.

20.—All tool boards, workbenches, waste containers, drop cord reels, parts cleaners and other equipment are conveniently arranged for service by any mechanic.

21.—A service button bell is at the parts window for a mechanic to summons a parts clerk. Another button is at the rear to be used by a common carrier delivery truck driver to call a clerk to receive parts material at the elevator.

22.—Tile walls in offices and washrooms are easily cleaned. Also a combination lunchroom and conference room. All, including the offices and dispatch waiting room, are air-conditioned. Asbestos base vinyl tile is used in offices and a special colored masonry floor in the rest room and lunch room. The thin layer of masonry is over chocolate-colored concrete. Acoustical tile



Now! **3** Disposable Can Sizes  
For All Car Air-Conditioner Jobs  
**NEW "PRESTONE" R-12\***  
BRAND

*Profit Now in this Booming Business*

\*dichlorodifluoromethane refrigerant

Serving Dealer Needs Better than Ever...with 1½ lb., 2lb. and 2½ lb. sizes to be used singly or in combination.

Count these advantages over bulky cylinders:

- 1 Money-saving inventory control. Parts Department can issue-and-charge "Prestone" R-12 Refrigerant to each individual job.
- 2 No shop waste...reduces loss from leakage.
- 3 No cash deposit...no weighing of bulky cylinders.

Count these advantages over small 15 oz. cans:

- 1 Just one package is large enough to fill a substantial number of auto air conditioners now in service.
- 2 Combinations of two or three of the 3 new "Prestone" R-12 sizes will fill any existing model auto air conditioners.
- 3 Faster charging of air conditioners.

**FREE** Send for "Prestone" R-12 "Air Conditioning Capacity Chart". Write: Sales Manager, Dept. S, "Prestone" Car Care Products, Union Carbide Consumer Products Company, 270 Park Avenue, New York 17, N. Y.



"Prestone", "Eveready" and "Union Carbide" are registered trade-marks for products of  
UNION CARBIDE CONSUMER PRODUCTS COMPANY • Division of Union Carbide Corporation • 270 Park Avenue, New York 17, N. Y.



Volkswagen's "big brother," the "VW-1500," is a two-door sedan designed for the European market. Six inches longer than the familiar Volkswagen, the car has luggage space both in front and rear trunks, latter space over the air-cooled engine. To be shown for the first time at the Frankfurt Automobile Show in Germany next September, the "VW-1500" will not be sold in the United States, according to Volkswagen of America.



# PREFERRED

*by operators everywhere..*

**MODEL D-50B**



## DYNAMASTER - AUTOMATIC TRANSMISSION TESTING MACHINES

Two Models—D-50A and D-50B test automatic transmissions prior to installation. Input speed range from 375 - 2,500 rpm—load application to output shaft regulated by hydraulic pump. Specially designed GE power for dependable operation. Equipped with flow meter for filling transmission. Transmission easily and quickly mounted. Mounts and adapters supplied as standard equipment. A brake pressure gauge shows applied brake load. Oil is returned to supply tank when transmission is drained after testing and filtered for re-use.

*Lowest Noise Level of All!*

*Write for Free Literature on all S-V Equipment*

**STORM-VULCAN, Inc.**

MANUFACTURERS OF AUTOMOTIVE ENGINE REBUILDING EQUIPMENT  
2225 Burbank Street • Fleetwood 1-3735 • Dallas 35, Texas

colored concrete. Acoustical tile ceiling is used in offices and corridor. An oil furnace for principal heating is supplemented by recessed electric heaters in office space. Low-pressure steam heat is used.

23.—There are 16 work stalls, arranged so that they still leave the center aisle clear. No stall is crowded.

24.—There is some specialization, particularly in heavy-duty and construction equipment and tune-up work. However, most of the mechanics are versatile enough to do anything required.

25.—There are checklists for guidance of the shop, in an extensively tailored maintenance program. Stickers are put on the dash or doorpost to inform drivers when the maintenance service is required. Preventive maintenance inspections are scheduled at periodic mileages and hours. Crawler tractors are on an hourly basis.

26.—A form is provided that the driver can use in a mileage report book on which to record complaints and turn them in to the shop. A shop order is made up usually by the shop foreman (Mack C. Price) for the work to be done and time spent. Work is assigned to a mechanic or team of mechanics.

27.—Besides the long washing and steam cleaning bay inside, there is an outside wash rack. It is served by steam and high-pressure water circuits for cleaning construction equipment and large trucks.

28.—Outside, too, is a loading ramp, designed to take advantage of the ground slope and fill required at that location.

29.—On the columns in the shop are convenience outlets for mechanics. There are 18 dropcord reels mounted on the columns. There are convenient plug-in sockets.

30.—A large yard and paved apron behind the garage provides ample parking and maneuvering space. An electrical wiring connection outside is under concrete rather than overhead.

When these Gabriel signs go up . . . your business will too!



*And they're all yours FREE when you sign up as a*  
***CERTIFIED GABRIEL DEALER!***

Half your customers need new shock absorbers right now . . . and 99% of them need to be reminded of it. That's why you'll be smart to sign up as a Certified Gabriel Dealer right away and get all these eye-catching Gabriel display pieces free:

**Permanent Metal Sign!** A flange-type sign—of heavy-gauge metal, with baked enamel finish—that goes on wall, fence or pole . . . identifies you as a Gabriel Shock Absorber Specialist.

**Spectacular Window Display!** Comes in three sections, and you may use one, two or all three, depending on the size of your window.

**Special Load-Absorber Display!** A big, colorful stand-up display you can use on the floor, in a window, on a counter, or out on an island (it's made of weather-resistant Masonite). It features a full-scale picture of a Load-Absorber and is equipped with hooks so that you can display an actual unit if you want to.

**Remember: shock absorbers represent one of the hottest sales opportunities in your business today.**

**So sign up with Gabriel . . . and move up to bigger profits!**

THE GABRIEL COMPANY • Cleveland 15, Ohio  
 Gabriel of Canada Ltd. • Toronto 14, Ontario





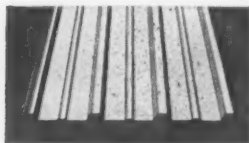
## DixiRib PERMA-COLOR PANELS



### ADD NEW BEAUTY AND VERSATILITY TO **DIXISTEEL** BUILDINGS

Your DIXISTEEL Building can be as bright and colorful as you want it. Six modern, compatible colors offer unlimited design possibilities. A two-coat baked-on vinyl enamel finish over a primer coat adds years of life and reduces maintenance.

Choose from 1200 basic designs in the DIXISTEEL line—any size or type with 4:12 or Lo-Line 1½:12 roof pitch. All are clear-span.



The distinctive design of DixiRib Panels not only adds beauty, but provides greater strength, rigidity, and improved drainage to DIXISTEEL Buildings. Unsightly overlapping is eliminated.

#### SIX BEAUTIFUL COLORS

- ◆ Blue
- ◆ Green
- ◆ Coral
- ◆ White
- ◆ Gold
- ◆ Gray

Contact Your Nearest Dealer or Mail This Coupon

Atlantic Steel Co., P.O. Box 1714, Atlanta, Ga. 8  
Please send me data and information  
on DIXISTEEL Buildings

NAME \_\_\_\_\_  
COMPANY \_\_\_\_\_  
STREET ADDRESS \_\_\_\_\_  
CITY \_\_\_\_\_ STATE \_\_\_\_\_

Free Estimates... No Obligation... Cheaper than Rent... 10 Years to Pay



Steel Building Division  
**Atlantic Steel Company**

P.O. Box 1714, Atlanta 1, Georgia • TRinity 5-3441

### Good Car Keeping Drive Set for Next Month

**E**NCOURAGING owners to be better car keepers is getting more oomph this year than ever before, offering a market on which car dealers, garagemen and service stations can capitalize.

Mayors of 2,700 municipalities over the nation are being asked by The Good Car\*Keeping Institute, Chicago, to proclaim a week next month in recognition of this activity, according to Vernon G. Volland, executive director of the institute.

"The 'good car keeping' concept has been receiving tremendous acceptance from the automotive industry and the motoring public," he said.

The institute, headquartered at 1711 Pratt Boulevard, Chicago 26, Ill., has available a variety of promotional pieces upon request, including a pledge by shop operators to inspect and service cars for appearance outside and inside, the cooling, electrical, ignition carburetor and fuel, exhaust, lubrication, wheel and running and the visibility systems—all of which are related to safety, economy and/or comfort.

"The ten commands of good car keeping are intended to aid motorists who are in doubt as to the proper care and maintenance of their cars," Volland explained. "These are safe recommendations to follow and will enable motorists to discover potential major problems before they become serious and dangerous. However, cars and their parts do wear out; they eventually need overhauling and rebuilding.

"Cars need regular, thorough tune-ups. By following the ten commands motorists will get the most service, safety, economy and pleasure out of their automobiles and, at the same time, recognize the most economical time for major repairs."

### F-85 Station Wagon Gets Third Seat

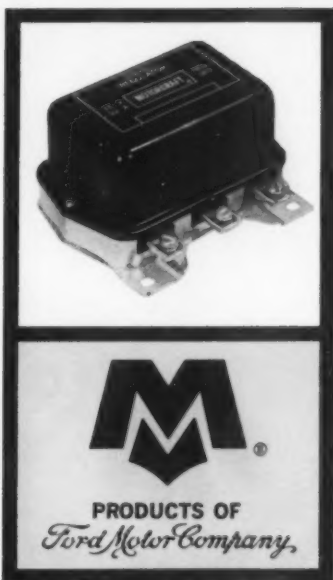
**A** THREE-SEAT F-85 Oldsmobile station wagon will be offered in F-85 and F-85 de luxe models.

Mounted between the wheel housings, the extra seat will face to the rear. When not in use, it will fold easily into the floor to permit full use of the 73 cubic feet of cargo space available.

Back rest and seat cushion are hinged together so that two simple motions will fold seat into the floor. The spare tire on the three-seat wagon is mounted vertically along the right rear side of the cargo area.



# WHO NEEDS 'EM?



We don't! They're adjustment screws used in many voltage regulators—and after a period of time, road shock and engine vibration may work them loose until factory calibration is changed. The result in many instances: a worn-out generator!

MOTORCRAFT regulators are calibrated by adjusting a metal arm. The position of this arm determines the point at which the contacts close. Thus, factory calibration remains the same . . . no matter how many times your customers drive over bumpy roads.

And for long, corrosion-resistant life, MOTORCRAFT voltage regulators have an exclusive heavy cadmium plating which is applied to all steel parts.

Quality design and engineering like this is typical of all the parts in the fast-moving MOTORCRAFT line.

## SERVICE PARTS BY MOTORCRAFT

cover a wide range for electrical, ignition and carburetor tune-up and repair jobs, and are available at leading parts suppliers every-

where. To keep your customers' Ford-built vehicles performing at their best . . . use the highest quality replacement parts available! MOTORCRAFT parts are built to back up your best work!

**QUALITY-BUILT TO PERFORM BETTER....LONGER**

# HELPFUL BOOKLETS FREE!

On this and the following pages is an excellent selection of free Automotive literature. List numbers of those desired on the coupon and mail to SOUTHERN AUTOMOTIVE JOURNAL.

## 103 SAMPLES, BOOKLETS, AND CATALOG SHEETS

Describing the DL Handi-Cleaner available on request. DL Products, Inc., Banite Bldg., Buffalo, N. Y.

**104 VENTILATED CUSHIONS**—Complete merchandising program on Kool Kooshions, including handsome wire display rack, full color catalog sheets, other advertising on complete Kool Kooshion line. Kool Kooshion Mfg. Co., Dyersburg, Tenn.

**105 WAGNER AIR BRAKE AND ROTARY AIR COMPRESSOR BULLETIN**—Discusses in detail straight air and air-over-hydraulic air braking systems. Contains an explanation of the operation of the Wagner Rotary Air Compressor complete with diagrams, cross section drawings, and photographs. Lists by catalog numbers component parts as well as field installation kits. Write for Catalog KU-201, Wagner Electric Corporation, 6362 Plymouth Avenue, St. Louis 14, Missouri.

**106 CAP MERCHANDISER**—How to increase profits by use of radiator and gasoline cap Merchandiser. The space saving Merchandiser saves you time and money while increasing sales and profits. Ask for detailed information. Stant Mfg. Co., 1620 Columbia Ave., Connerville, Ind.

**108 ELECTRICAL EQUIPMENT FOR 1960 PASSENGER CARS**—New booklet, fully illustrated covers description of units as well as servicing and adjustments of charging circuit, starting circuit and ignition circuit. Also covers D.C. and A.C. Generators. Delco-Remy Div., Technical Literature Section, Anderson, Ind.

**109 AMMCO BRAKE SERVICE, ENGINE REPAIR, AND HONING TOOLS AND EQUIPMENT**—Catalogs, describing the Ammco line of brake drum lathes, brake shoe grinders, brake drum micrometers, bleeders, brake safety checking instruments, pin fitting honing machines, small bore hones, cylinder hones, cylinder surfacing hones, ridge reamers and torque wrenches. Ammco Tools, Inc., 2110 Commonwealth Ave., North Chicago, Ill.

**110 HEAVY DUTY AUTOMOTIVE AIR TOOLS**—Complete details including prices on heavy duty air impact tools and accessories, tire service tools and IMPACut-ter. Proof of time, labor, and money savings on many automotive service jobs. John K. Uhler, Ingersoll-Rand Co., Phillipsburg, N. J.

**112 SOUND SLIDE FILM**—Entitled "Automotive Wheel Bearings" is the first in a series of audio-visual aids designed to provide bearing salesmen, servicemen and replacement parts men with practical and useful information on various applications for ball, roller and engine bearings and on oil seals. Federal-Mogul Service, 11031 Shoemaker Ave., Detroit 13, Mich.

**114 32 REASONS FOR OIL CONSUMPTION**—An easy-to-use, indexed corrective manual listing 32 major oil consumption problems and remedies. Informative, illustrated, prepared by one of the top technical staffs in this field. Write—Oil Consumption Booklet, American Hammered, 2001 Sanford Street, Muskegon, Mich.

**116 REMANUFACTURED ENGINE BROCHURE**—New 6 page folder helps sell vehicle owners on the many advantages of remanufactured engines. The back provides space for the installer, the jobber, or the rebuilder to imprint his name. It provides an excellent sales aid piece for engine rebuilders and their jobbers to supply to service outlets installing engines. Muskegon Piston Ring Co., Muskegon, Mich.

**117 AUTOMOTIVE ELECTRICAL EQUIPMENT CATALOG NO. D-200**—Applies to automobiles, trucks, trailers, farm and industrial equipment. New 64 page catalog covers entire field of automotive switches, connectors, wiring accessories, etc. Voltage ratings are clearly specified in large type for all switches, and other units. Cole-Hersee Co., 20 Old Colony Ave., Boston 27, Mass.

**118 BRAKE SERVICE GUIDE**—Complete instructions for inspecting, flushing and bleeding the brake system. Handy trouble check chart. Write for Bulletin HU-411, Wagner Electric Corp., 6400 Plymouth Ave., St. Louis 14, Mo.

**119 FILTER SERVICE MANUAL AND SPECIFICATIONS**—24 pages contains useful service information on oil, air and fuel filters. Pictures and graphs give oil filter service on all late model cars. Also includes filter specifications for domestic and foreign cars and trucks as well as cross reference charts. Purolator Products, Inc., 970 New Brunswick Ave., Rahway, N. J.

**121 SALES AIDS AND MERCHANDISER CATALOG, FORM D-227**—Features a complete line of quality automotive electrical equipment mounted on effective "Business Getting" displays. This colorful 8 page catalog covers the entire field of switches, connectors, voltage reducers, etc. for automotive truck, trailer, bus, marine, farm, earth-mover and industrial equipment. Cole-Hersee Co., 20 Old Colony Ave., Boston 27, Mass.

**122 TESTING EQUIPMENT CATALOGS**—Describe the Autrol which is an indoor stationary road test machine featuring an instrument test tower, and loaded rolls for engine testing under road conditions, and the Powerscope, an engine oscilloscope which measures and tests ignition performance in conjunction with the Autrol. Bear Mfg. Co., Rock Island, Ill.

**123 AERO-SEAL HOSE CLAMPS**—An illustrated 4-page folder giving clamp ranges, mechanical information, engineering data, stock numbers, packaging, etc. Breeze Corp., Inc., 700 Liberty Ave., Union, N. J.

**125 STANDARD DUTY GENERATOR REGULATORS**—A 16-page 8½ x 11 inch booklet covering the operations and maintenance of Delco-Remy regulators. (62 pictures) Contains illustrations showing various steps of adjustment. Will help automotive electricians understand and service regulators. Delco-Remy Service Department, Anderson, Indiana.

**127 HYDRAULIC BRAKE FLUID SERVICE—HOW TO CHECK, DRAIN, FLUSH, REFILL, BLEED**—Easy reference book that contains helpful service instructions as well as detailed descriptions and illustrations of the latest methods and procedures for profitably servicing hydraulic braking systems. Send for Bulletin HU-411, Wagner Electric Corporation, 6362 Plymouth Avenue, St. Louis 14, Missouri.

**132 AUTOMOTIVE SERVICE GUIDE**—A practical and factual presentation of the use of Impactools in automotive servicing. Contains time study reports showing how dealers and shops can increase profits for both themselves and their mechanics. Automotive Service Guides are now available for Ford, Chevrolet, Plymouth, Oldsmobile, Hudson, Studebaker and general truck service. Specify which Guides you want. John K. Uhler, Ingersoll-Rand Co., Phillipsburg, N. J.

**133 CATALOG NO. 36**—Features more than 300 Champ-Items automobile replacement parts for all makes of cars. A handy service book. Champ-Items, Inc., 6190 Maple Ave., St. Louis 14, Mo.

**134 MOOG RINGLINER**—Illustrated piston ring catalog carries listings and product information on complete line of Moog cast iron, partial chrome and Chrome Plus lines. Moog Industries, Inc., 6650 Easton Ave., St. Louis 14, Mo.

**138 PLUG CHECK**—A colorful wall banner showing condition of spark plugs under various driving conditions. This service tool is designed to assist service men in diagnosing spark plug heat range problems. The Electric Autolite Co., Toledo 1, Ohio.

**141 MOOG STREAMLINER CATALOG**—Carries exploded views, detail illustrations and listings of leaf springs, main leaves, spring parts, shackles, shock links, tie rod ends, drag links, king bolts, coil springs and other coil action parts for cars and trucks. Moog Industries, Inc., 6650 Easton Ave., St. Louis 14, Mo.

**142 1958 MUFFLER CATALOG SUPPLEMENT**—Lists high efficiency mufflers and dual exhaust equipment for each model of 1958 cars. Grand Automotive Products, 2055 N. Ruby St., Melrose Park, Ill.

**143 TRUCK SERVICE GUIDE**—32-page bulletin gives the truck service shop accurate time and cost comparisons in doing a number of common service jobs by hand and with air and electric power tools called Impactools. With this guide, a truck service shop can evaluate more accurately its present service equipment and determine in advance the actual savings that it may expect through using Ingersoll-Rand air and electric Impactools. Ingersoll-Rand Co., 11 Broadway, New York, N. Y.

**146 HAND CRIMPING TOOL**—Descriptive circular. Strips and also crimps Rajah terminals to ignition cable. The Rajah Co., 35 Verona Ave., Newark, N. J.

**149 TIRE & TUBE REPAIR MATERIALS**—Are listed in this new 12-page catalog. Gives the complete line offered and also the stock numbers, quantity in package and the shipping weight. Ace Rubber Co., P. O. Box 6147, Dallas, Texas.

**155 MAKE MORE SALES ALL OVER THE LOT**—Attractive 2-color folder shows how to increase gas, oil and TBA sales and turn new customers into steady. Pullman Vacuum Cleaner Corp., Dept. P, 25 Buick St., Boston 15, Mass.

**160 SUGGESTED SHOP PRICES ON MACHINE SHOP OPERATIONS**—A 24-page booklet giving suggested shop prices on everything from align bore blocks to valve jobs. Prices represent average price gathered from jobbers in U. S. and Canada. Van Norman Automotive Equipment Co., 3640 Main St., Springfield 7, Mass.

**165 SPARK PLUG SERVICE & INSTALLATION MANUAL, FORM 7K**—18-page booklet gives type, construction, size, heat range, and service procedure of spark plugs. Also deals with spark plug tools and special installations, analyzes service conditions, gives hints for selling spark plugs, etc. Champion Spark Plug Co., Toledo, Ohio.

**169 YOUR ANSWER TO VAPOR LOCK**—New technical bulletin deals with vapor lock and hot-motor re-starts and explains how Flit-O-Reg helps prevent these conditions and increase engine efficiency. Alondra Sales, Inc., 959 Crenshaw Blvd., Los Angeles 19, Calif.

**173 HYDRAULIC PARTS**—Complete master catalog of the complete line of Els hydraulic parts. Lists and illustrates the complete line of repair kits, hoses, stop-light switches, brake-master and wheel assemblies. Information complete up to 1957. Els Automotive Corp., Middletown, Conn.

**178 MUFFLER SERVICE MANUAL**—Gives simple step-by-step instructions on installation short cuts for any pipe or muffler service problem. The manual 36 pages in color and fully illustrated, will enable dealers to save time on all installations reducing most to 15 minutes or less. The AP Parts Corp., 1801 Spielbusch Ave., Toledo 1, Ohio.

**182 DIESEL SHOP MANUAL**—76 pages. Includes 275 illustrations, 56 engine reference tables and 26 parts lists. Bacharach Industrial Instrument Co., 200 N. Braddock Ave., Pittsburgh, Pa.

**183 BADGE-O-RAMA PROFIT KIT**—83 piece profit kit of eye-catching badges, a different one for each week of the year given free with Pullman Vacuum. Pinned to attendant's shirt these silent salesmen promote seasonal TBA items at customer's eye level. For sample badge and full information write Pullman Vac-

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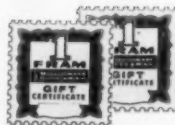
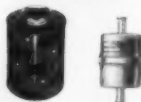
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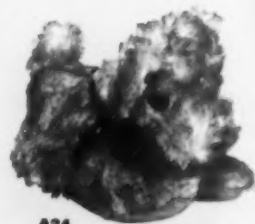
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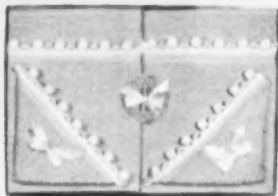


A24

A21 GREEN SPOT DELUXE SPRINKLER—3 solid brass arms. New convenient handle. Sled runners.  
A22 G. E. CLOCK—"The Dorm Alarm", beige case, white dial, brown numerals.  
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A25 CANNON TOWEL SET—2 terry hand towels, 2



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A26



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A28

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A26 PFLUEGER FISHING FLIES—Slide-O-Matic transparent box. 1 doz. assorted streamers, wet flies.  
A27 DEAUVILLE 2 PC. SHEFFIELD CARVING SET — Extra heavy gauge, hollow ground, carving knife. Forged fork. Luxtrex handles. Chrome bolsters.  
A28 WEBERLITE "TRUE-TEN" MINNOW BUCKET—High-insulation plastic. Wire frame and handle. Highly buoyant. "No-loss" cover.

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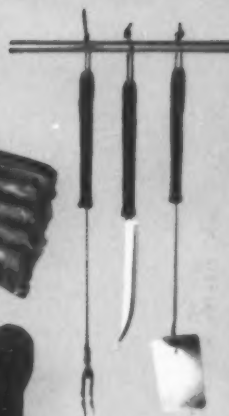
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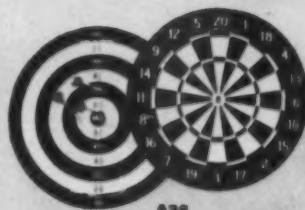
A33



A34



A35



A36



A37



A38

A31 HAMPSHIRE AIR MATTRESS—Built-in foot pump inflates mattress in 30 sec. Rapid deflate valve. 75" x 30" with attached pillow section.  
A32 SKOTCH KOOLER — Giant 4-gal. size. Durable super-hard finish. Brilliant color combination.  
A33 THERMOS "ICY-HOT" PICNIC JUG—1 gal. capacity. Extra thick fiberglass insulation. Exclusive wheel-type faucet. Leak proof.  
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A36 DART GAME—Two-sided Dartboard 18" diameter. Features target, 20 point games, 3-5" metal darts.  
A37 UNIVERSAL "SPECTATOR" BEVERAGE KEEPER—Keeps liquids cold or hot—36 hours. Leather-like tan case. Shoulder strap. Qt. capacity, with cups.  
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**4 GIFT CERTIFICATES**  
(Free with 4 Dozen Cartridges)



A42



A41



A43

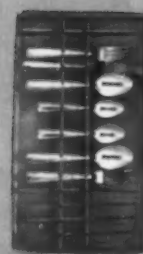
A41 IMPERIAL 7-Pc. KITCHEN SET - Stainless steel. Wonds-wood handles. Ladle, turner, spoon, fork, spatula, potato masher, metal rack.  
A42 BANLON SPORT SHIRT - Short

sleeved. Ribbed waist band. Wash-and-wear. Green, beige or gold. S,M,L, X-L.  
A43 GREEN SPOT OSCILLATING SPRINKLER - New convenient handle. Sled-type base. Can be moved while operating.

**5 GIFT C**  
(Free with 5



A51



A52

A51 RADIO STEEL GARDEN CART - For Lawn & Garden. Recessed puncture-proof wheels. "Congo" Graphite bearings.

A52 IMPERIAL 24 Pc. STAINLESS STEEL FLATWARE - 6 each of knives, forks, spoons, teaspoons in modern pattern.

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A62



A63

A64

A61 FITTED PICNIC BASKET - Varnished fibre. Rack and stainless steel cutlery, plastic plates and cups for 4.  
A62 MIRRO ALUMINUM 14-Pc. CAMP & PICNIC SET - 2, 4 & 8 qt. kettles; 9" & 10" fry pans, 4 plates, 4 plastic cups, 2 qt. coffee pot, 2 fry pan handles.

A63 "FEATHERLITE" NYLON PARKA - Zipper front, rubber lined, convertible collar. Sizes: S,M,L,X-L.  
A64 PFLUEGER FLY ROD AND REEL SET "Progress" fly reel. High quality ferules, guides, reel seat. Tubular glass rod with terrific action. Cork grip.

**7 GIFT CERTIFICATES**  
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A71

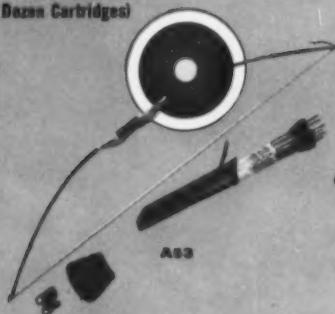


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A71 WEN-MAC "DAUNTLESS" DIVE-BOMBER - Drops a bomb "in-flight". Operational tail hook. 22" wingspan. Automatic starter engine.  
A72 RADIO STEEL "FLYER" WAGON - America's most popular! 36" x 15 1/2" x

4 1/2". Automobile-style tires.  
A73 IMPERIAL 5 Pc. KNIFE SET - Stainless steel, hollow ground blades. French chef's knife, narrow blade slicer, utility butcher knife, utility knife, paring knife.

**5 GIFT CERTIFICATES**  
(Free with 5 Dozen Cartridges)



A53



A54

A53 CAMPERS SENIOR ARCHERY SET—60" ash bow, pistol grip. Large decorated quiver. 3-color 1½" thick target. 6 arrows. Draw weight: approx. 30 lbs.

A54 ALUMINUM LAWN CHAIR—Extra large for comfort. 1" tubing with crown back, ribbed arms.

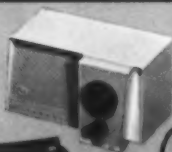
**10 GIFT CERTIFICATES**  
(Free with 10 Dozen Cartridges)



A101



A102



A103



A104

A101 WESTINGHOUSE TABLE RADIO—Handsome, modern design. "Silver safeguard chassis". Long range antenna. A102 WEST BEND 30-CUP AUTOMATIC PERCOLATOR—Brews 12 to 30 cups of perfect coffee. Gleaming aluminum.

A103 COLEMAN GASOLINE STOVE—2 burner camp stove. Folds up like a suit case. A104 THERMOS OUTING KIT—2-qt. size vacuum bottles, two sandwich boxes, 6 cups. Zippered plaid carrying case.

**12 GIFT CERTIFICATES**  
(Free with 12 Dozen Cartridges)



A121



A122



A123



A124



A125



A126

A121 IMPERIAL 50 Pc. STAINLESS STEEL FLATWARE—8 each of knives, forks, spoons, salad forks, 16 teaspoons, 1 sugar shell, 1 butter knife in modern pattern.

A122 HANDY-HANNAH HAIR DRYER—Deluxe model. 4 controlled heats and attached cap. Extra long cord and shoulder strap.

A123 BARBECUE CHARCOAL GRILL—24" heavy gauge, fireproof bowl. Copper-tone finish. Hood with motor driven spit. Unbreakable wheels.

A124 COLEMAN GASOLINE LANTERN—Double mantle floodlight lantern. Burns 10-12 hours without refueling. Large ventilator reflects light down. 2 pt. rust-resistant steel tank.

A125 KESTRAL "PLAYMATE" SWIMMING POOL—Rugged coated wire sides. Liner of heavy vinyl. Size: 96" x 15", holds approx. 470 gals. Hose drain plug.

A126 PFLUEGER SPIN CASTING SET—Famous "83" spinning reel with immediate line control. 6 ft. glass rod. Cork grip. Complete with 100 yds. line.

**14 GIFT CERTIFICATES**  
(Free with 14 Dozen Cartridges)



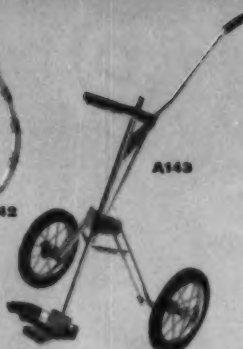
A141

A141 THERMOS "POSITEMP" ICE CHEST—Holds 40 12-oz. bottles, 70 lbs. of ice. Food tray, drain, attached bottle opener. Light, sanitary, leak-proof. A142 RAWLINGS GOLF BAG—4-stay model. 2 covered metal dividers. Molded rubber handle and



A142

bottom. Accessory pocket, large ball pocket. Umbrella holder, hanging hood. A143 RAWLINGS GOLF CART—New fold-up cart with 10" spoke wheels. Ball bearing construction. Adjustable knee action. Holds any size bag.



A143

**18 GIFT CERTIFICATES**  
(Free with 18 Dozen Cartridges)



A181

A181 LAMBERT "AMBASSADOR" LAWN SWEEPER — Flip exclusive HITE SELECTOR lever to sweep 25" path on driveway or lawn. Hamper lifts out. A182 WESTINGHOUSE 6 TRANSISTOR PORTABLE RADIO—Large easy-to-turn dial. Full tone speaker. Automatic volume control. Built-in ferro-core antenna. Gray saddle stitched travel case. Batteries included.



A182

**24 GIFT CERTIFICATES**  
(Free with 24 Dozen Cartridges)



A241



A242

A241 WESTINGHOUSE "RIVERIA" FAN—Whisper quiet. Two speeds. Use as table or hassock-type fan. Exclusive safety blades. Westinghouse 5-year guarantee. A242 WARING DELUXE BLENDOR — Chrome model. Two speeds. One-piece Pyrex jar with built-in stainless steel cutting blades. Blends, chops, mixes. UL & CSA approved.



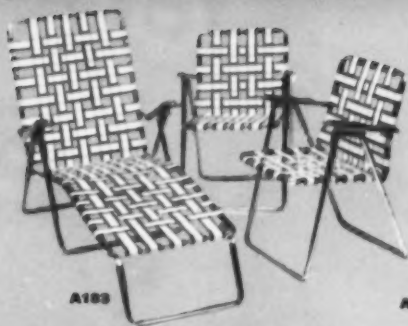
A243

A243 CHANNEL MASTER TRANSISTOR RADIO—Portable, cordless, table model. 6 transistors. Works on 4 flashlight batteries. Rich, big tone. Caramel with white and gold trim. A244 KESTRAL KATAMARAN MARK I BOAT—6 pontoons. Aluminum mast and boom. Tubular aluminum frame. Sturdy front stabilizer fin and rudder. Rugged oak cross-bars.



A244

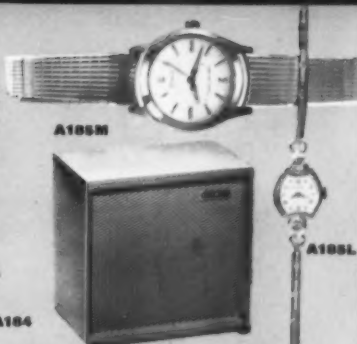




A183

A183 ALUMINUM FOLDING LOUNGE SET — Four-position contour chaise lounge. 2 yacht chairs. Polished aluminum with woven plastic webbing. Lightweight, quick folding, weatherproof.

A184 FRAM ROOM AIR CLEANER—Keeps air hospital clean, free of odors. Kills 99+ % of germs trapped in exclusive Fram "Permachem"-treated filters.



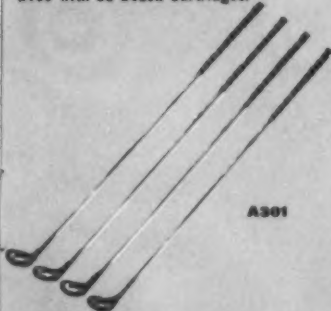
A185M

A185L

A185L BENRUS WATCH—"Lady Pat". 17 jewels, gold top, stainless steel back, unbreakable mainspring. Expansion bracelet.

A185M BENRUS WATCH—"Water Baron". 17 jewels. Guaranteed waterproof. Stainless steel case, luminous hands, shock-absorbing movement, unbreakable mainspring. Expansion bracelet.

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A301 RAWLINGS 4 SWING-MATCHED GOLF WOODS—1, 2½, 3½, 4½. Bill Ogden autograph. Solid persimmon heads. Flomatic shafts. Leather grips. Large sole plates.

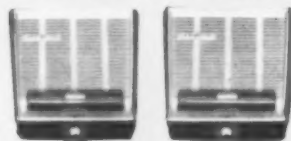
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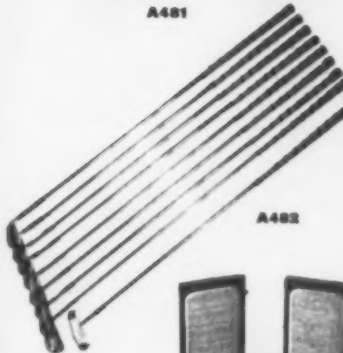
A401

A401 THERMOS POP-TENT CAMPER — Fiberglass rib supports. Pops up in 90 seconds. Sleeps two. Sewn-in floor, zippered net. 30" carrying bag.

### 48 GIFT CERTIFICATES (Free with 48 Dozen Cartridges)



A481



A482



A483

A481 G.E. PORTABLE 2-WAY INTERCOM—Needs only to be plugged into existing outlets of 105-120 volts AC. Many uses at work or in the home for room to room communication.

A482 RAWLINGS 9 SWING-MATCHED GOLF IRONS —2, 3, 4, 5, 6, 7, 8, 9 and putter. Bill Ogden autograph. Back-weighted heads. U.S.G.A. approved face scoring. Leather grips.

A483 WESTINGHOUSE PORTABLE STEREO—Two lift-away speakers can be placed up to 15 ft. apart. 4-speed changer. Dual sapphire stylus.

**120 GIFT CERTIFICATES**  
(Free with 120 Dozen Cartridges)



A1201 DRIVEX 1961 "COMPETITION" KART—Powered by Clinton A-490 engine. Speed range: 20-40 mph. Pneumatic tires. For racing or family fun. Extra mounting plate for second engine.

**144 GIFT CERTIFICATES**  
(Free with 144 Dozen Cartridges)



A1441 ZENITH "ROYAL 1000 D" TRANSOCEANIC RADIO—Combination standard and short wave portable. 9 transistors. Smallest, lightest, most powerful made. 9 wave bands.

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A WHOLE NEW SELECTION OF GIFTS  
ABSOLUTELY FREE !!!!!**

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**1 MILLION\$\$\$  
GIVEAWAY**

**Free gifts are easier to get than ever because  
Fram Filters are easier to sell than ever!**

**PRODUCT:** New Fram "Wear-Guard" Filters are the greatest advance in engine protection since detergent oils!

**POSTERS:** Brilliant new billboards sell new Fram "Wear-Guard" Filters in major traffic areas!

**POST ADVERTISING:** Fram "Wear-Guard" Filters are featured in Saturday Evening Post with 13,455,000 readers.

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**FRAM FILTERS: OIL, AIR, FUEL, WATER**  
*YOUR FIRST LINE OF ENGINE PROTECTION*

**FRAM CORPORATION, PROVIDENCE 16, R. I.**

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uum Cleaner Corp., 25 Buick St., Boston, Mass., Dept. SAJ.

**185 PRESCRIPTION FOR BETTER ENGINE OVERHAULS**—16 page booklet contains information on how to diagnose a case of excessive oil consumption and how to make the necessary corrections. Perfect Circle Corp., Hagerstown, Ind.

**197 BATTERY TESTING PROCEDURE**—Fully illustrated booklet gives step by step outline of fast, simple and accurate battery testing procedure. Also gives list of recommended testing equipment to have on hand. Delco-Remy Div., Technical Literature Section, Anderson, Ind.

**205 HOW TO INCREASE ENGINE LIFE** 90%—Illustrated booklet tells how to reduce wear to moving parts and insure better performance from automobiles or trucks by explaining the air filter—the vital piece of equipment through which an engine breathes. Fram Corp., Rumford Post Office, Providence 16, R.I.

**206 THE SERVICE STORY ON SHOCK ABSORBERS**—Handbook points out that one of every four cars on the road is in need of some kind of shock absorber service. It illustrates proper servicing procedures, including importance of periodic inspection of shock absorbers on air suspension cars. It is designed to simplify shock absorber installations. United Motors Service Div., 3044 W. Grand Blvd., Detroit 2, Mich.

**207 1957 BRAKE SHOE CATALOG** — With illustrations of brake shoes and their proper application, etc.—National Brake Block Corp., 37-17 57th St., Woodside 77, N. Y.

**211 SERVICE TOOL CATALOG**—Illustrates and describes more than 70 tools designed to solve specific problems for the repairman. Each helps to speed up jobs, make operations easier, cut shop costs. Hastings Mfg. Co., Hastings, Mich.

**214 THE WHYS AND HOWS OF VOLTAGE REGULATORS**—Explains in simple language, every detail of Voltage Regulators—how they work, why they are important, how to adjust and service them. In 16-page handy pocket size edition, with many working drawings to clarify and illustrate the text. Standard Motor Products, Inc., 37-18 Northern Blvd., Long Island City 1, N. Y.

**221 NEW REPAIR KIT FOLDER**—Gives information on Jack-Pack automatic transmission sealing line (overhaul kits, gasket sets, lip seal sets, rubber sets, sealing rings); Noz-L-Pack automatic nozzles repair kits for Buckeye and OPW nozzles and complete line of Jack-Pack jack repair kits and jack oil. For free copy write: Jack-Pack Mfg. Co., 2115 N. Marianna Ave., Los Angeles 32, Calif.

**222 "WHAT PRICE QUALITY"** — Read how ignition parts should be made and why. "WHAT PRICE QUALITY" tells the story of the making of quality ignition parts. Written in non-technical language. Standard Motor Products, Inc., 37-18 Northern Blvd., Long Island City 1, N. Y.

**225 THE "CAMEL COOLIE" VENTILATED SPRING CUSHION** four color catalog page is now available. This newest product is hailed by the industry as a welcome addition to the Camel line. H. B. Egan Mfg. Co., Muskogee, Okla.

**226 OIL LEAK DETECTOR** — Bulletin shows how hooking up the bearing oil leak detector reveals internal engine conditions, uncovers main, rod or cam bearing wear, plugged oilways, starved bearings, before tearing down the engine. Also describes how the detector checks the completed overhaul and pre-lubricates moving parts before turning over the engine. Illustrates two sizes with maintained oil pressure—one for cars, one for larger truck engines. Federal-Mogul Service, 11031 Shoemaker, Detroit 13, Mich.

**235 METHODS OF TUBELESS TIRE REPAIRING**—An authoritative brochure with illustrated steps on the permanent repair of tubeless tires, using either the hot or cold vulcanizing methods is available from H. B. Egan Mfg. Co., P. O. Box 1406, Muskogee, Okla.

**242 AUTOMOTIVE LINES**—4-page booklet lists all of the Solder Seal chemical tools, giving part numbers, size, case contents, list and dealer prices. Radiator Specialty Co., 1400 W. Independence Blvd., Charlotte 8, N. C.

**243 HOW TO SELL MORE OIL, OIL FILTERS, LUBRICATIONS AND TBA ITEMS**—12-page illustrated booklet gives profitable tips on increasing your sales and making every customer a happy customer. Pullman Vacuum Cleaner Corp., 25 Buick St., Boston 15, Mass.

**244 SPARK PLUG INSPECTION CHART**—Form No. M-1433—A full color chart that can be tacked or taped up onto walls showing both normal and abnormal appearance of spark plugs plus tips on how to get top performance from spark plugs. The Electric Autolite Co., Toledo, Ohio.

**250 FUEL PRESSURE REGULATORS** — Informative folder answers such questions as "What is fuel pressure regulator," "Why do I need one," "Why isn't it original equipment," and "Is it guaran-

teed." Milesmaster, Inc., 1550 E. 74th Place, Chicago 19, Ill.

**251 NEW EATON CAP CATALOG**—Illustrating and describing Eaton radiator pressure caps, fuel tank caps, locking gas caps, oil filler caps and the new Eaton cap and cooling system tester. Also catalog-sheet showing special cap combination offers, and new Eaton cap merchandiser display rack which acts as an "automatic cap salesman" and saves time in checking inventory and ordering fastest moving items. Eaton Mfg. Co., Stamping Div., 17877 St. Clair Ave., Cleveland 10, Ohio.

**254 MASTER BRAKE SERVICE GUIDE**—Contains fully illustrated, step-by-step instructions for adjusting and relining the twenty different types of hydraulic wheel brakes used on passenger cars and light and medium trucks and buses. World Bestos Div., Attn.: Sales Prom. Mgr., New Castle, Ind.

**255 TOOL CATALOG "X"** — 128-pages gives pictures, descriptions and specifications of the complete line of Snap-On



## VALVES AT YOUR FINGER TIPS AT NO INCREASE IN PRICE...

Dispenser-Pak #5254 contains:

- 30 T-151-R Valves for 15" Wheels... packed 10 to a tube
- 20 T-13-R Valves for 13" and 14" Wheels.. packed 10 to a tube
- 1 Fomecor Dispenser
- 1 Five-Color Display Mobile
- 1 Safety Gage, the snap-in valve selling tool

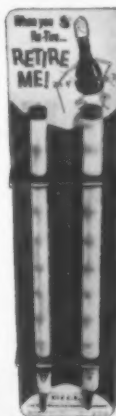
You get all of these at the same rate as when you bought 10 valves to a box. Order from your supplier today.



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Offices in Toronto and Los Angeles



## HELPFUL BOOKLETS FREE!

Tools and shop equipment, including the latest electrical and electronic engine testing instruments, wheel aligning and balancing equipment, etc. Snap-On Tools Corp., Kenosha, Wis.

**264 TIRES VALVES, EQUIPMENT AND TOOLS**—Complete jobber catalog describes the entire line; giving numbers, description, packaging and weight of each item. Acme Air Appliance Co., Inc., 205 Newman St., Hackensack, N. J.

**265 TIRE VALVE WALL CHART**—Comparison chart shows application of tubeless tire valves by car name. Also shows the interchange stock numbers of other manufacturers. Acme Air Appliance Co., Inc., 205 Newman St., Hackensack, N. J.

**270 1960 TUBELESS TIRE VALVE WALL CHART**—Measuring 19" x 25", the free chart lists 67 models of 18 major American cars, with their corresponding wheel size; tire size; manufacturers' recommended tire pressures, both front and rear; plus complete recommended valve information both for 1960 models as well as earlier model cars. It also gives comparable information for 28 models of 12 popular foreign make cars. The Dill Mfg. Co., 700 E. 82nd St., Cleveland 3, Ohio.

**271 AUTOMOTIVE CHEMICALS**—8 page catalog gives description of each item in the Permatex line giving uses, parts numbers and sizes. Permatex Co., Inc., 300 Broadway, Huntington Station, New York, N. Y.

**273 "HOW TO EARN BIG PROFITS IN BRAKE SERVICE"**—Booklet tells how to spot and sell brake service prospects. Shows how a small investment in brake equipment will yield annual return of over 267%. Includes a check list of equipment and accessories necessary for a profitable shop. Amco Tools, Inc., 2100 Commonwealth Ave., North Chicago, Ill.

**275 PISTON RING**—16-page booklet contains a description of the Modern Power features of Ramco Piston Rings complete with illustrations. Ramsey Corp., P.O. Box 513, St. Louis 66, Mo.

**283 CARBURETOR WALL CHART**—Three color 17" x 22" trouble shooter chart locates the sources of seven common types of carburetor trouble and gives specific causes and remedies. Hygrade Products Div., Standard Motor Products, Inc., 37-18 Northern Blvd., Long Island City 1, N. Y.

**285 INSTALL RATHER THAN OVERHAUL**—A booklet designed to show dealers, independent repair shops and installing shops the many benefits resulting from the installation of rebuilt engines. Write Muskegon Piston Ring Co., Muskegon, Mich.

**288 LOTION-TYPE SKIN CLEANER**—Illustrated brochure gives you six pages of instructions on how you can cut hand-cleaning time and help prevent dermatitis. Gojer, Inc., Box 991, Akron, Ohio.

**289 CREME HAND CLEANER**—8-page booklet contains illustrated information on how you can save 75% on clean-up costs and safeguard employees against dermatitis and other painful skin irritations. Includes listing of other cleaning preparations, money-saving dispensers, and convenient brackets. Gojer, Inc., Box 991, Akron, Ohio.

**293 MUFFLER INSTALLATION GUIDE**—New 1959 Muffler Installation Guide includes photos and easy-to-read instructions for removing and replacing mufflers. Special suggestions and short cuts are given for particular car makes and models to provide a thorough guide for all types of installations. Walker Mfg. Co. of Wisconsin, Racine, Wis.

**297 SCREW DRIVER CATALOG NO. SD 56**—Colorful catalog showing over 400 different sizes and styles of hand tools. Screw Drivers, Nut Drivers, Pliers and Wood Chisels, are presented in clear pictures and tables showing complete dimensions. Merchandising Displays helpful Screw Charts and standardization tables are also shown. Vaco Products Co., 317 E. Ontario St., Chicago 11, Ill.

**298 SOLDERLESS TERMINAL CATALOG NO. T 70**—Over 60 different sizes and styles of Solderless Terminals are illustrated in a beautiful 4 color catalog. Actual size illustrations plus blue print type of drawings with all dimensions clearly marked, make for easy selection of the proper Terminal, for every need. Regular, Quick Connect and the new Insulated type of Solderless Terminals are shown. A Quick Reference Card with actual samples mounted, is also available. Vaco Products Co., 317 E. Ontario St., Chicago 11, Ill.

**299 SELLING RING JOBS**—8-page folder entitled "The Sealed Power 4-Way Check Plan" shows you the essential points necessary for successful ring jobs. Will greatly assist you in doing a better selling job with customers. Sealed Power Corp., 500 Sanford Ave., Muskegon, Mich.

**300 VALVE CATALOG**—No. 59 gives 29 pages of alphabetical valve listings, and also includes interchange list and numerical list. Manley Valve Corp., 1523 Fairmount Ave., Philadelphia 30, Pa.

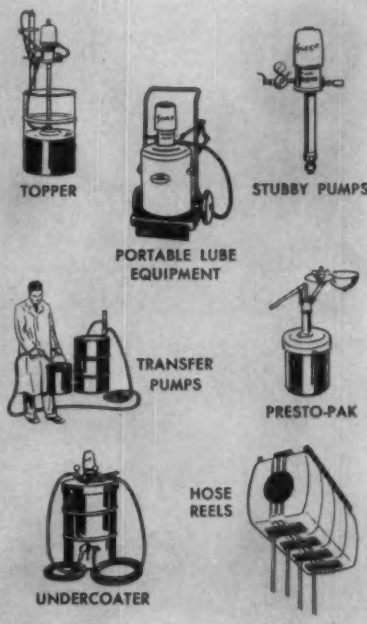
**305 DUAL-PURPOSE TIRE REPAIR PATCHES**—Illustrated catalog describing new Self-Vulcanizing Dual-Purpose Patches. Metal dispenser cabinet for shop use—patches packed in handy dispenser cartons. Monkey Grip Sales Co., P. O. Box 6170, Dallas 22, Texas.

**306 NEW FRICTION TAPE DISPLAY**—Illustrated catalog covering entire line of Monkey Grip Friction Tape and Plastic Electrical Tape, features new merchandising rack for carded Friction Tape. Also, counter display containers for boxed tape. Monkey Grip Sales Co., P. O. Box 6170, Dallas 22, Texas.

**307 TIRE REPAIR MATERIALS, AUTO MATS, AND AUTOMOTIVE RUBBER PRODUCTS**—New complete 24-page catalog covering Monkey Grip Products for the Automotive Trade. Colorful, illustrated and informative. Monkey Grip Sales Co., P.O. Box 6170, Dallas 22, Texas.

**308 TUBELESS TIRE REPAIR PLUGS**—Molded rubber plugs for on-the-wheel puncture repairs in Tubeless Tires are

One way  
or another,  
each of these  
significant  
advances in  
automotive  
servicing  
equipment  
was either  
pioneered or  
perfected  
by



# GRACO

"There is hardly anything in the world  
that some man cannot  
make a little worse  
and sell a little cheaper  
and the people who consider price only  
are this man's lawful prey."

RUSKIN

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ENGINEERS AND MANUFACTURERS

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# "Our Switch to Gates Quadrupled Belt Sales"



*... put more money in the bank every month!"*

**says V. L. McAnally — McAnally's Texaco Service**

**9200 Dyer, El Paso, Texas**

"In the ten years I worked in service stations I noticed that the stations which handled Gates sold the most belts and hose.

"So—when I took over here about a year ago, I made the switch to Gates and was able to raise belt sales from only ten a month to 40 a month—and we're still climbing! I credit this to two facts:



That my customers readily accept Gates Belts and Hose, and that my employees are kept on their toes checking belts by the Gates 'Mystery Car Campaign.'

"Together, Gates products and Gates sales incentives mean more money in the bank every month! My men find it easy to sell Gates Belts—and easy to install them, too. I think the Dial Finder is the best sales tool furnished by any manufacturer—and I rank Gates Belts among the five top-profit items I handle."

**"Go" Gates for Profit...Call your Gates Jobber Today!**

Your Gates Supplier will have a factory-trained Gates Representative install attractive belt and hose displays, clean up your belt and hose stocks, and supply you with a complete set of station-tested Gates Sales Aids. He'll also help you get your present stock in shape for top profits—and you won't lose a penny!

**The Gates Rubber Company, Denver, Colorado**

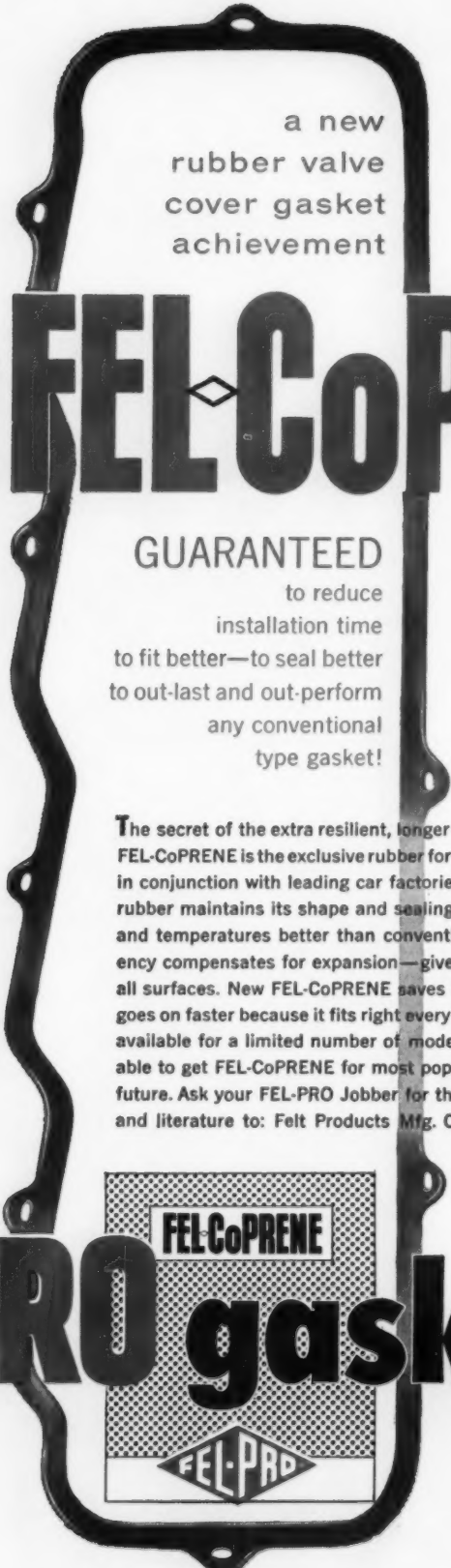


**World's Largest Maker of V-Belts**



TPA555

## *Gates Vulco V-Belts & Hose*



a new  
rubber valve  
cover gasket  
achievement

# new **FEL-CoPRENE**

**GUARANTEED**  
to reduce  
installation time  
to fit better—to seal better  
to out-last and out-perform  
any conventional  
type gasket!

The secret of the extra resilient, longer lasting performance of new FEL-CoPRENE is the exclusive rubber formula developed by FEL-PRO in conjunction with leading car factories. This special composition rubber maintains its shape and sealing ability at higher pressures and temperatures better than conventional types. Its extra resiliency compensates for expansion—gives better conformability for all surfaces. New FEL-CoPRENE saves on installation time, too. It goes on faster because it fits right every time. FEL-CoPRENE is only available for a limited number of models right now, but you'll be able to get FEL-CoPRENE for most popular late models in the near future. Ask your FEL-PRO Jobber for the facts or write for samples and literature to: Felt Products Mfg. Co., Skokie, Ill. Since 1918.



# **FEL-PRO gaskets**

specially designed  
with your profit  
uppermost in mind!

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# INFORMATION CENTER



BOOKLETS • NEW PRODUCTS • ADVERTISEMENTS

**Help yourself to free literature  
and more details on any prod-  
ucts mentioned in this issue.**

Instead of writing a dozen different manufacturers for free literature and more information on parts, equipment, accessories or services, just insert the appropriate key numbers of the New Product or Booklet listings in which you are interested. For more information on advertisements, just indicate the page number on which it appears.

Be sure to print or write legibly your name and address—drop it in the nearest mail box and

**SAJ pays the postage!**

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#2 APRIL 1961

Send me these FREE Catalogs and Bulletins . . . Fill in numbers

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Type of Business . . . . .

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can help  
you get  
valuable  
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# NOW! Save time with YOUR OWN

## **Snap-on** FLOOR PRESS

### **NEW, Compact, 20-TON Hydraulic Press**

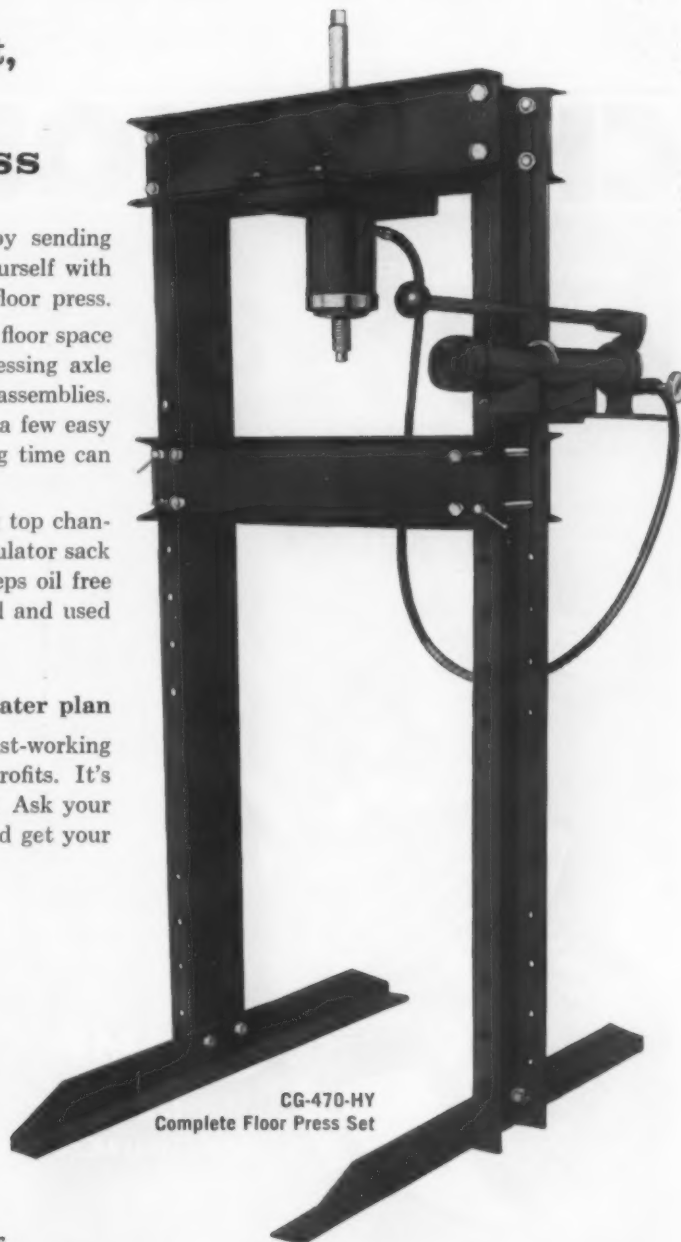
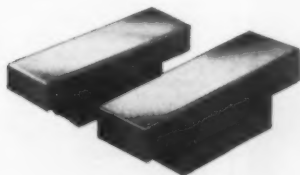
Don't waste valuable time and profits by sending pressing or pulling jobs out. Do them yourself with this powerful SNAP-ON 20-ton hydraulic floor press.

Compact, it requires only 2 ft by 3 ft of floor space — yet it handles all the big jobs like pressing axle bearings or pressing bushings in front-end assemblies. Even the tightest pressed fits are off with a few easy strokes of the handle — pulling or pressing time can be cut from hours to minutes.

You can slide ram back and forth along top channel to any desired position. Special accumulator sack on pump eliminates back pressure and keeps oil free from dirt. Pump and ram can be removed and used with other pullers.

#### **Get it on SNAP-ON'S earn-now, pay-later plan**

Start making money with this powerful, fast-working floor press right now — pay for it out of profits. It's yours for a little down, a little each week. Ask your SNAP-ON man the next time he calls — and get your free copy of new Catalog X.



SERVICE-BACKED SHOP EQUIPMENT  
**SNAP-ON TOOLS**

8052-D 28th Avenue

• Kenosha, Wisconsin

## HELPFUL BOOKLETS FREE!

described in new catalog. Plugs are available in complete shop assortment kit, consumer kit, and packages according to size. Monkey Grip Sales Co., P. O. Box 6170, Dallas 22, Texas.

**311 TUNE UP SPECS** — 8-page booklet containing latest 1959 ignition tune up specifications for trucks, small engines and tractors is being offered free by Standard Motor Products, Inc., 37-18 Northern Blvd., Long Island City 1, N. Y.

**313 NEW IGNITION BOOKLET FOR JOBBERS** — Entitled "What do you EXPECT from Ignition?" presents new and valuable information on the growth and profit possibilities of ignition, as well as some interesting sidelights on the use of ignition as a business stimulator for other wholesaler lines. Shurhit Products, Inc., Waukegan, Ill.

**314 WAGNER BRAKE PARTS CATALOG** — A handy ONE-POINT reference to fast-moving brake parts and lining, covering popular models of cars and trucks. Catalog also lists complete stock of shoe exchange sets, as well as CoMaX bonded lining segments available to those interested in bonding lining in their own shops. Wagner Electric Corporation, 6362 Plymouth Avenue, St. Louis 14, Missouri.

**315 BETTER IGNITION** by Delco-Remy — 16-page, 8½ x 11-inch booklet covering theory, operation and maintenance of Delco-Remy ignition equipment. Contains 71 illustrations. Will help automotive electrici-

cians understand and service ignition equipment. Delco-Remy Service Department, Anderson, Ind.

**316 20,000 VOLTS UNDER THE HOOD** — Covers the basic operation of the electrical units in the ignition circuit. It shows how battery voltage is built up to 20,000 volts at the spark plug. Delco-Remy Division, Anderson, Ind.

**317 THE CRANKING CIRCUIT** — This shows the units in the cranking circuit and how they operate together as a team to crank the modern automobile. Written in simple non-technical terms so it can be easily understood. Delco-Remy Division, Anderson, Ind.

**319 BRAKE AND SHOCK CATALOG** — 20 page catalog and price list of Girling brakes and shock absorbers for imported cars. Covers popular models from 1948-1959. Includes brake and clutch supply tanks, lined brake shoes, brake parts, service kits, disc brakes and shock absorbers. Lucas Electrical Services, Inc., 501 W. 42nd St., New York 36, N. Y.

**320 NEW DEALER CATALOG OF MOTOR REBUILDING EQUIPMENT** — Features the complete Storm-Vulcan jobber line of engine rebuilding machines. Attractively printed in two colors, punched and slotted for inclusion in jobber salesman's catalogs. Storm-Vulcan, Inc., 2225 Burbank St., Dallas 35, Texas.

**323 BRAKE LINING** — A new 18-page condensed catalog listing brake lining recommendations for all popular passenger cars, commercial cars, etc. Vehicles are listed by year and model. Recommendations are made both for riveted and for bonded lining. World Bestos Corp., Attn.: Sales Prom. Mgr., New Castle, Ind.

**326 TOOL CHESTS AND CABINETS** — Folder gives prices, descriptions, dimensions, etc. of the complete line of quality built tool chests, cabinets, porta-cabs and tuldexs. Huot Mfg. Co., 550 N. Wheeler Ave., St. Paul 4, Minn.

**327 SHOP INFORMATION CHART** — Colorful 9 x 6 chart includes easy-to-read information necessary for machine shops, such as decimal equivalents, general tap information, tap drills for pipe taps, American standard machine screws. Huot Mfg. Co., 550 N. Wheeler Ave., St. Paul 4, Minn.

**329 AUTOMOTIVE EQUIPMENT CATALOGS** — Describing the complete line of Graco automotive lube equipment, supplies and accessories. Covering supply pumps, overhead service reels, motor oil dispensers, portable equipment, ATF dispensers, undercoaters, bearing packers, transfer pumps, waste oil receivers, dispensing guns, control valves, adapters, nozzles, hand operated units, hose, hose assemblies and fittings. Write for catalogs 103 and 204, Gray Co., Inc., Graco Square, Minneapolis 13, Minn.

**330 POWER CLEANING EQUIPMENT** — Brochure describing applications and specifications of Graco Hydra-Clean units, power washing spray products. Covers full line including detergents and accessories. Also describes profit-making ideas and uses. Gray Co., Inc., Graco Square, Minneapolis 13, Minn.

**333 3M AUTOBODY REPAIR AND FINISHING SYSTEM** — Colorful 20 page booklet contains sections devoted to metal preparation, featheredging, masking, pre-paint sanding and the use of adhesives and sealers. Sanding and masking recommendations are also made for working with acrylic lacquers, etc. Also attention is given to special tools, such as molded discs and disc pads, pressure-sensitive discs, cones, mandrel, and backup assemblies. Minnesota Mining & Mfg. Co., Dept. F-O-107, 900 Bush Ave., St. Paul 6, Minn.

**334 TIRE VALVES, PARTS AND ACCESSORIES CATALOG** — New 24-page dealer catalog, No. 14, illustrates and describes complete line of tire valves, parts and accessories. Included with each catalog is latest tubeless tire valve application chart indicating the proper valves to be used with any model of American and popular foreign make cars. Operating information, specifications, ordering, and packaging information are given for each applicable product. Dill Mfg. Co., 700 E. 82nd St., Cleveland 3, Ohio.

**336 NEW FILKO IGNITION PARTS CATALOG** — Big 160-page catalog contains complete listings of all Filko Ignition Replacement Parts for practically every make and model of car, truck, bus and tractor. New simplified listings make the new Filko Catalog exceptionally easy to use. F & B Mfg. Co., 4248 W. Chicago Avenue, Chicago 51, Ill.

# CHAMPION

## with EXCLUSIVE OIL MONITOR

Prevents costly "down time" ... guards your equipment against losses by automatically disconnecting the compressor when the oil level drops below normal operating range.

Champion Air Compressors are available in single and two stage models ranging from 1/2 to 20 Hp.

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compressors/pumps/accessories

Representatives in  
Principal Cities

**CHAMPION**  
PNEUMATIC  
MACHINERY CO.  
PRINCETON 3, ILLINOIS

# COMPRESSORS



## NEW PRODUCTS AND CATALOGS

### 600—Wheel Aligner

"Lift-A-Matic" wheel aligner announced by John Bean Division, Food Machinery & Chemical Corp., Lansing, Mich., puts full-scale wheel alignment service in a single service stall.

Aligner rack is 15' 10" in over-all length and eliminates long runways and



approaches through use of a remote-controlled air lift device which operates the runways. In the "down" position, the rear tips of the runways are on the floor, allowing the operator to drive the car on the rack with a minimum of turning space. Variable-tread runways adjust to tread widths from 40" to 68" and take vehicles up to 136" wheelbase and 6,000 lbs. weight at 150 lbs. air pressure. Equipment is available with mechanical gauges, "Visualiner" optical heads or rack only.

Want more info? Use coupon on page 121 and you will get it!

### 601—Drum Lathe Adapter Set

A set of three 1 7/8" to 1" step-down adapters announced by Ammco Tools, Inc., 2100 Commonwealth Ave., North Chicago, Ill., allows 1 7/8" bore truck drum mounting cones to be used on a 1" arbor.

Using "No. 4790" set, truck drums within weight and hub length limitations can be turned on the standard 1" arbor of the company's "Model 3000 Safe-Turn" brake drum lathe.

Want more info? Use coupon on page 121 and you will get it!

### 602—Transmission Sealer

Stabilizing action of "Stop-Leak" transmission fluid introduced by Wynn Oil Co., Azusa, Calif., reportedly revitalizes dry seals and firms softened ones and fluid is guaranteed to stop automatic transmission leaks caused by shrinking, hardening and drying of seals.

Product will also smooth rough idling, speed up sluggish shifting and extend the life of the entire unit, it was claimed. It works with all types of transmissions and seals and is com-

patible with all Type A transmission fluids, according to the manufacturer.

Want more info? Use coupon on page 121 and you will get it!

### 603—Gauge Catalog

A 1961 catalog supplement carrying its latest automotive gauges has been published by Accurate Products, Inc., 135 N. Spring St., Indianapolis, Ind., and describes in detail, with pictures and copy, its line of de luxe steering-post-mounted ampere, oil pressure and water temperature gauges; economy under-the-dash-mounted gauges, plus combination gauge kits and individual ampere, oil pressure and water temperature gauges. Catalog "A61B" also displays the tubing, fittings, panel brackets and light source kits necessary to make all installations.

Want more info? Use coupon on page 121 and you will get it!



**DL** not only cleans hands **CLEANER, FASTER**

**... but also cleans hands  
"HEALTHY CLEAN"**

**because:**

1. DL's exclusive deep-down cleansing action dissolves oil, grease and grime, "lifts it out," preventing formation of ingrained grime.
2. DL keeps hands in good "working condition" because DL contains both Lanolin and Hexachlorophene. Lanolin conditions skin, keeps it soft, prevents roughness and chapping. Hexachlorophene guards against dermatitis, protects nicks and cuts from infection. DL is equally effective used with or without water!

Available in Original Cream Type or New Liquid. Low cost DL Dispenser for use with 5 lb. can insures economy. More than 600 hand washes in 5 lb. DL Can.

For full details write us... Dept. SAJ-4-21

**DL PRODUCTS, INC., Buffalo 4, N. Y.**  
Canadian Offices: 236 Borsman St., Toronto 18, Ontario



#### 604—Car Washer

Operating on ordinary city water pressure and requiring no engines, motors or electrical connections, the "Cyclo-Matic" 'G' car washer announced by John Bean Division, Food Machinery & Chemical Corp., Lansing, Mich., is designed specifically for such users as service stations, car dealers, fleet operations, used-car lots and garages where car washing has in many cases been a "necessary evil."

The automatic equipment is operated by a water-powered turbine which propels the washing heads 3 times around the car in a 6-minute cycle. There is a built-in prevention against drying and streaking, it was claimed,

since the jet bar continues to circle the car even if the operator is away from the equipment. Turbine unit travels on the channel bar frame and has 6 sealed ball bearings with brass friction drive rollers, none of which requires lubrication. Unit can be suspended from any 9' ceiling or overhead support (such as an outdoor carport) and can be easily moved out of the way.

Want more info? Use coupon on page 121 and you will get it!

#### 605—Gas Storage Facility

"Sto Flo Gas Kart" model "300" announced by Ward Mfg. Co., 717 Woodcrest Drive, Royal Oak, Mich., eliminates the need for open pan draining



and refilling of gas tanks when working on automobiles.

With a bright red epoxy finish, unit is labeled "Gasoline" on all 4 sides and holds up to 25 gallons. Equipped with a transfer pump, unit enables user to transfer gasoline through a hose directly to "Kart." It can be stored away under a bench or other convenient area for safety purposes. A sintered bronze filter insures that only clean, uncontaminated gasoline is refilled into the gas tank, while a petcock permits complete drainage of sediment from transparent bowl. A 2" opening in the tank is equipped with a flame arrester and 3 static dissipating wheels are part of each unit. The discharge hose is equipped with a gas-station-type self-closing nozzle.

Want more info? Use coupon on page 121 and you will get it!

#### 606—Body Filler

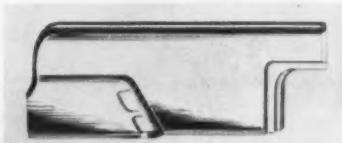
"Black-Smith," a plastic truck and automobile body filler introduced by Marson Corp., 765 Parkway, Revere 51, Mass., is said to have excellent flexibility and adhesion, very low dust factor, rapid cure and absence of pinholes from the hardened repair.

Product is non-toxic, it was claimed, utilizes the cream-type hardener, will not shrink, crack or corrode, resists acid, alkalies, gasoline and water and conforms and gives with the metal, even under severe impact.

Want more info? Use coupon on page 121 and you will get it!

#### 607—Body Panels

Ready to install, "Bond-Tite" body panels introduced by L. R. Oatey Co., 4700 West 160th St., Cleveland 35, O., are designed to fit over damaged or rusted areas without "cutting in."



Rocker, door, quarter, fender and headlight-patch panels are available from an assortment of more than 320 panels for most makes and model cars. All panels are die-formed, contoured and guaranteed to fit. Sold individually—right or left—or in pairs, they are boxed in easily identified cartons.

Want more info? Use coupon on page 121 and you will get it!

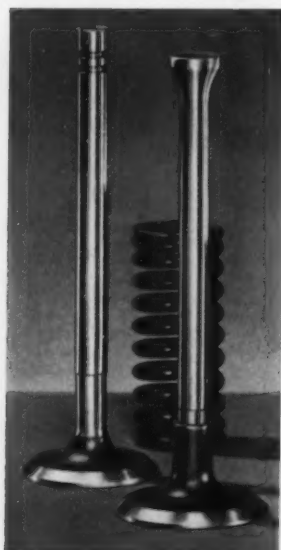


"HAD THESE DRY CHARGE BATTERIES ON YOUR SHELVES QUITE A WHILE, HAVEN'T YOU?"

motor jobs turn out sweeter when you install . . .

## Manley airchrome valves and springs

Manley Valve Corporation, 15th St. & Fairmount Ave., Philadelphia 30, Pa. Supplier to leading original equipment manufacturers. District Sales Representative: J. S. Connell Co., Dallas.







## The NEW Rubbermaid Master Wheeler

**Attracts Impulse Sales . . .** by dramatically displaying Kar-Rugs in actual car floor setting. Customers sell themselves when they can see, touch and select. Wheels to your best traffic location, inside or out.



**ASK YOUR JOBBER**  
to rush your No. 0836 display NOW.  
Be ready to cash in on the big Spring  
selling season ahead.

**Creates New Profit Opportunity . . .** Not just "brand-switching" but a completely new way to pick up new sales and profits. Every car owner is a customer—this display tells and sells him on Kar-Rugs.

**Easy to Own . . .** Master Wheeler No. 0836 comes packed with one brown No. 1428 Styleliner. Dealer cost for both **\$9.95**—sell Styleliner at \$10.95 retail—the display's yours and you pocket a buck.



RUBBERMAID INC. • AUTOMOTIVE DIVISION • WOOSTER, OHIO

## 608—Lighting Line

Designed to meet the most rugged service conditions encountered in fleet operations, a complete automotive lighting line announced by Tung-Sol Electric, Inc., 1 Summer Ave., Newark 4, N.J., includes 6 new miniature lamps and a new direction signal flasher.

The miniatures deliver up to 3 times previous rated life under the most severe operating conditions, it was claimed. The "550" flasher operates from 2 to 6 32cp lamps with positive pilot action. The remaining flashers in the line reportedly meet all other 6- or 12-volt fleet applications. The headlamps—"4005" dual and "6013" standard 7"—reportedly possess the

most durable filaments ever produced by the company. Their features include a ceramic collar which maintains correct filament relationship, long-life design filaments, siamese-weld lead wires and vibration absorbing fog caps.

Want more info? Use coupon on page 121 and you will get it!

## 609—Wheel Alignment Set

To provide full wheel alignment service with a minimum requirement for space, a mobile wheel alignment set announced by John Bean Automotive, Food Machinery & Chemical Corp., Lansing, Mich., is built around a bench on casters which is a self-contained



storage unit for all the equipment when not in use.

Unit may be moved to the job anywhere in the shop. A background sign keeps tools and parts on the bench and also merchandises the "department" to customers. The most complete model includes the bench, 4 wheel stands, magnetic caster-camber gauge and adapter, toe-in gauge, caster-camber wrench set, 2 turntables, ball joint wrench and socket set, shim assortment and operator's manual. Several other models with less equipment are also available.

Want more info? Use coupon on page 121 and you will get it!

## 610—Filter Kit

"K-11" conversion kit announced by Fram Corp., Rumford Post Office, Providence 16, R. I., allows installation of its "Easy-Change" oil filters on all models of Volkswagen.

Want more info? Use coupon on page 121 and you will get it!

## 611—Pinion Seal Tool

Pinion oil seal installation tool announced by Chicago Rawhide Mfg. Co., 1301 Elston Ave., Chicago 22, Ill., is specially designed to fit around pinion shafts for correct seal installation with considerable ease.

Seven adapters cover all popular cars and light trucks. Adapters are precision-molded of oil-resistant, high-impact plastic and hold the seals firmly in position for installation while protecting sealing lips from splines, according to the manufacturer.

Want more info? Use coupon on page 121 and you will get it!



# NEW FROM Pick

A FULL LINE OF HYDRAULIC BRAKE PARTS:

**Stople Switches**

**Hydraulic Brake Hose**

**Master Cylinder Repair Kits**

**Wheel Cylinder Repair Kits**

**MASTER AND WHEEL CYLINDER REPAIR KITS**  
Repair kits to fit all cars... and many trucks. Cups molded of High Temperature Resistant Rubber... meets SAE 60E2 specifications.

**HYDRAULIC BRAKE HOSE**  
Numbers to fit all cars and many trucks. Each hose individually boxed for convenient stocking; part number clearly marked for quick identification.

**STOPLITE SWITCHES**  
Complete coverage of passenger cars... and many trucks. Individually boxed for easy, convenient stocking. Keep popular numbers on hand for emergencies.

**SPECIAL INTRODUCTORY OFFER ON PICK WHEEL CYLINDER REPAIR KITS!**

Two assortments... each containing coupons worth \$1.00 credit against purchase of axle set of Pick Exchange Shoes.

Deal #4—Contains 1/2 doz. each of the 8 most popular wheel cylinder kits (48 kits)... and four \$1.00 coupons.

Deal #9—Contains 1 doz. each of the 8 most popular wheel cylinder kits (96 kits)... and nine \$1.00 coupons.

Also a twelve Kit Pack for the price of eleven!  
Ask your Pick jobber... Special Offer expires June 30, 1961

**PICK MANUFACTURING COMPANY • Automotive Division • West Bend, Wis.**

½" Drive, Size 5U-HD Electric Impacttool with 5" extension, handles all but the largest nuts and bolts on cars and trucks.



*exclusive*  
**I-R's LIFE-GUARD COMMUTATOR**  
**...guards motor for life**

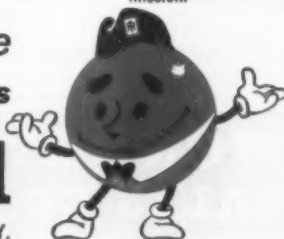
Ingersoll-Rand design features a unique safety stop on brush holder that keeps spring from contacting or damaging commutator and burning out motor. Commutator can be dressed while tool is operating, simply by removing reverse cap. Wider commutator bars permit wider brushes and more brush area. Look for these red ● ball extras before you buy!

*best design—biggest line  
look for the red ● ball extras*

**Ingersoll-Rand**

11 Broadway, New York 4, N. Y.

- **Dirt-Sealed Trigger.** Plunger-operated switch is sealed tight from dust and dirt. Another I-R exclusive.
- **"Cuss-Proof" Socket Retainer.** Sockets can't fall off, but strong, spring-held retainer can be easily replaced.
- **Sealed Nose Bumper.** Exclusive I-R rubber guard seals out dirt in addition to protecting impact mechanism.
- **Job-Tailored Motor.** Not "adapted" but built specifically for rugged impacttool duty.
- **T-Anvil Drive.** Unlike other types, provides true radial blow with maximum power transmission.



203A-18

## 612—Head Holder

Removing valves and springs reportedly can be made easier with the "Wi-To-Co" cylinder head holder announced by Winona Tool Mfg. Co., Winona, Minn., because the head can be placed at just the right height and angle.

Valve grinding will also be an easier job, it was claimed, when the head is locked securely in the most natural working position. The head can be rotated to lie flat on the bench for driving out or installing valve guides and seats, the manufacturer said. Heavy serrations in cups and adapter assure positive holding in all positions. Keepers prevent thumb screws from being



lost. The holder is also said to end much lost time in hunting for cap screws, washers and wrenches. Cam face is hardened for maximum life.

Want more info? Use coupon on page 121 and you will get it!

## 613—Transmission Jack

Featuring a 72" lifting height, the "T-2" transmission jack introduced by Blackhawk Automotive Division, 5325 W. Rogers St., Milwaukee 46, Wis., reportedly can be used to service all automobile and light-truck automatic and conventional transmissions, as well as many types of differentials, front axles or cross members.

Unit is specifically designed for transmission work that is performed on a



hoist or over a pit. With special accessory adapters, it will handle the Pontiac Tempest transaxle and Corvair power train. Four wide-spread legs provide a stable base, while sturdy leg braces add required rigidity for handling heavy power trains, transaxles, etc., where the load overhangs the carrier. A 2-stage treadle release meters the hydraulic fluid and permits mechanic to lower the ram at slow or fast speed for positioning the transmission. Saddle tilts 28° forward, 10° backward and 10° to either side. The "T-2" has a capacity of 1,000 lbs., a low height of 32" and weighs 175 lbs.

Want more info? Use coupon on page 121 and you will get it!

## 614—Lock-Nut Wrench

Designed to easily turn the lock nut which holds the speedometer cable in truck transmissions, "No. 516" wrench announced by Owatonna Tool Co., 306 Cedar St., Owatonna, Minn., reportedly does the job quickly and without damage to parts.

Want more info? Use coupon on page 121 and you will get it!

## 615—Filter Catalog

Containing listings of numerous applications of oil, air, fuel and water filters as used on internal combustion engines, its 1961 specifications catalog announced by Fram Corp., Rumford Post Office, Providence 18, R. I., is designed to serve as a basic industry guide to replacement cartridges wherever needed on vehicles from tractors to sports cars. Catalog contains a cross reference plus an alphabetical listing of all vehicles and engines.

Want more info? Use coupon on page 121 and you will get it!

# Safer repairs... more profit ... when Vulcanized with **MONKEY GRIP** **"SIZZLE" PATCHES**

Give customers the assurance of complete safety and satisfaction on every puncture repair... and build extra profits for you while doing it!

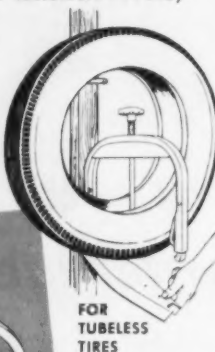
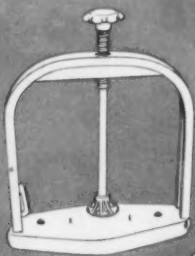
The Monkey Grip "Sizzle" patch way pleases your customers... they know the tire is safe... the repair secure... because it's **VULCANIZED**. No guess work or half-size "quickie" method to cause safety worries. When "complete tire inspection" is a part of every job extra sales for other materials and services add greatly to your profits. Repairs with "Sizzle" patches are sure, safe and profitable!



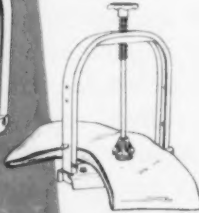
**ONE PATCH... ONE CLAMP — Save Dollars On Equipment and Inventory!**

"Sizzle" patches have Filler\* Tabs to plug the hole. 2-sizes make all puncture or slit repairs. C-24 Clamp handles all passenger car size tires and all tubes.

\*Patented



FOR  
TUBELESS  
TIRES



FOR TUBES

Use "Sizzle" patches for longer cuts or tears.

Your Monkey Grip jobber can supply you with materials and equipment for a complete tire and tube repair set-up. Call him today.



*The World's Best*

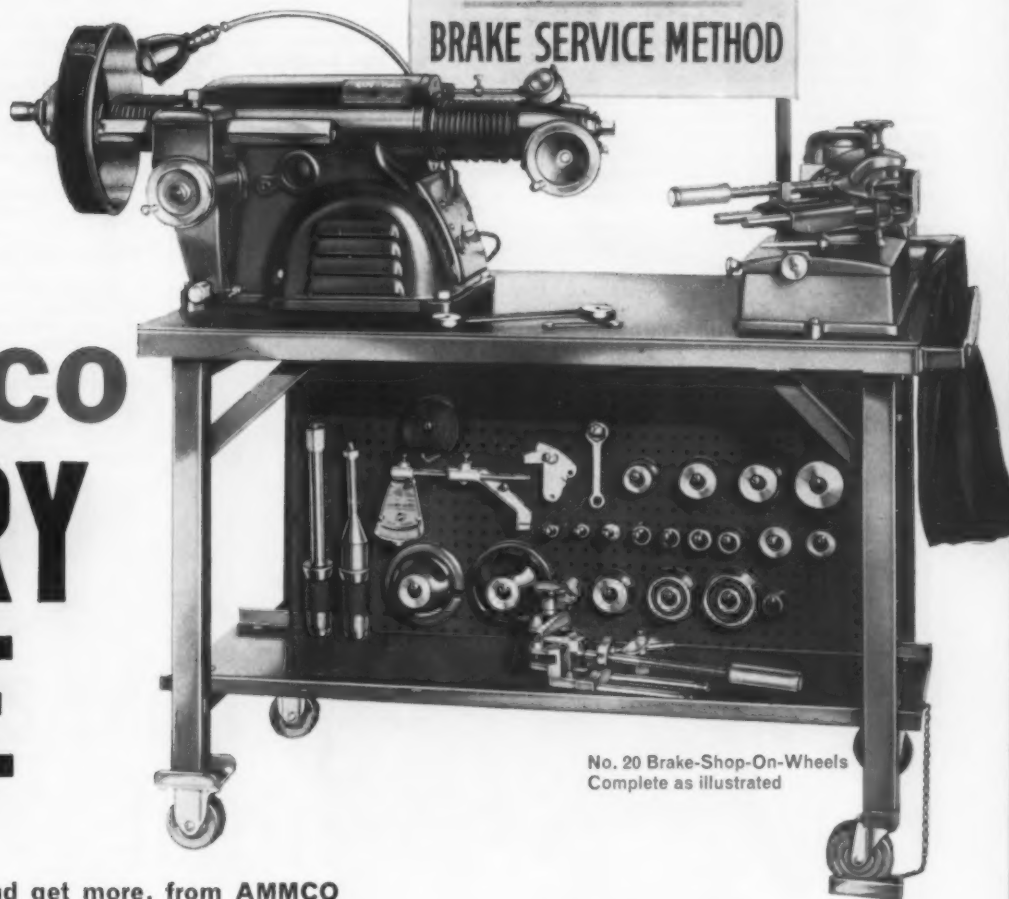
**MONKEY GRIP**  
**SALES CO. DALLAS 22, TEXAS**



# COMPARE\*

AMMCO  
WORLD RENOWNED  
**SAFETY**  
BRAKE SERVICE METHOD

# IT'S AMMCO EVERY TIME



No. 20 Brake-Shop-On-Wheels  
Complete as illustrated

You expect more, and get more, from AMMCO

- **COMPLETE**—You don't have to buy "extras" to handle everyday jobs.
- **ECONOMICAL**—Pays for itself, plus a profit with only one complete job a week.
- **COMPACT**—Stores in space often wasted by empty soft drink cases.
- **RUGGED**—Sturdy, precision construction for years of trouble free service.
- **MOBILE**—Do brake work outdoors or anywhere indoors.
- **SELLS** Brake Service. Complete, effective Dealer Promotion Program.

● **INSTRUCTION** and **SERVICE** by skilled **AMMCO Technicians**.

\* **COMPARISON IS EASY!** Write for free demonstration in your own shop.

*NO DOUBT ABOUT IT*



*IS THE BUY*

**AMMCO TOOLS, INC.,** 2158 Commonwealth Avenue, North Chicago, Illinois

### 616—Vacuum Power Brake

Developed for vacuum operation from any gasoline-powered towing car or truck, "Uni-Brake," announced by Velvac, Inc., 3534 W. Pierce St., Milwaukee 15, Wis., is a vacuum power brake unit designed to simplify brake installation on small and medium trailers equipped with brake drums and hydraulic wheel cylinders.

Compact in size, unit is completely self-contained, with built-in reservoir, 1 1/2" hydraulic master cylinder, check valve and brake release cock. It is easily hooked up to power brakes on towing car for foot-pedal-synchronized brakes and requires no external levers or adjustments, according to the manufac-

turer. Two models are available, one for commercial use with 1/2" hose and another for 3/8" hose. Each provides automatic brake application on disconnect.

Want more info? Use coupon on page 121 and you will get it!

### 617—Air Conditioner

The "Nordic Dialair" automobile air conditioner introduced by International Automotive Air Conditioning, Inc., 1927 S. W. 1st Ave., Fort Lauderdale, Fla., features controlled diffusion through 5 adjustable louvers which reportedly provide maximum distribution of cool air, without direct air blast.

Both volume of air and degree of coolness are "dialed," allowing many



setting combinations, the manufacturer said. Minimum restriction of air flow through 7 openings on the face of the unit is said to provide faster, more efficient cooling of the rear as well as the front of the car. Unit operates almost silently, it was claimed, with twin squirrel-cage blowers mounted in the rear.

Want more info? Use coupon on page 121 and you will get it!

### 618—"Hang-Over" Creeper

Hard-to-get-at linkage, distributors, belts, heater components, wiper controls, etc., are within easy reach without undue stretching and contortions with the "Hang-Over Tune-Up Hoist" introduced by Hinkley Myers Co., 28501 Mound



Road, Warren, Mich., which puts the mechanic under the hood and over the engine.

Completely portable, lightweight and adjustable for heights, "Hang-Over" is available in both steel and aluminum. A tray is provided to hold tools where they are needed.

Want more info? Use coupon on page 121 and you will get it!

### 619—Fuel Pump Chart

Measuring 17" x 22", a fuel pump application wall chart announced by Wells Mfg. Corp., Fond du Lac, Wis., carries a complete alphabetical listing of U.S. cars by make, year and model, giving original equipment pump number and the correct corresponding "Capac" fuel pump stock number. One column contains a listing of the minimum and maximum pressure in pounds for each fuel pump, as an aid when testing on the car engine.

Want more info? Use coupon on page 121 and you will get it!

### 620—Repair Panels

A "Head-Lite" repair panel for all 1956 Chevrolet models announced by Schofield Mfg. Co., 1140-3 E. 222nd St., Cleveland 17, O., is said to bring to more than 700 the total number of body repair panels manufactured by the company.

Want more info? Use coupon on page 121 and you will get it!



**Shurhit**  
**TRU-TURN**  
externally adjustable  
voltage regulator

Since its inception by Shurhit in 1947, the Tru-Turn has proved itself in tens of thousands of applications to be the most practical and most satisfactory voltage regulator yet devised for general service work. It provides a simple, positive, screw-type adjustment which eliminates need for removing the cover, and permits accurate final volt-ammeter readings at the time the adjustment is made.

Shurhit Heavy Duty Tru-Turn Regulators give you more rugged quality — more real \$\$\$ VALUE at no additional cost. Save time — speed up service with SHURHIT — the line of least resistance.

 **Shurhit** PRODUCTS, INC., Waukegan, Illinois  
WORLD'S FINEST IGNITION

Newest Tractor "Pink List"  
of Replacement  
Gaskets and Oil Seals

This List and Available Stock  
Now at your Victor Jobber's



# Parts you'll need for tractor servicing

Use this Victor catalog for fast, accurate ordering. Covers "99%" of your sealing parts needs. Gasket listings include full and head sets; valve, manifold and oil pan sets; plus other individual parts. Oil seal numbers given for each application. All tractor models and applications completely identified. You'll save a lot of job time and trouble by using this catalog—and you'll be sure all sealing parts are right and dependable. Get your free copy from your Victor Jobber.

Victor Mfg. & Gasket Co., P.O. Box 1333, Chicago 90, Ill. Canadian Plant: St. Thomas, Ontario.

## COVERS THE POPULAR MODELS OF ALL THESE MAKES:

ALLIGATOR	FERGUSON
ALLIS-CHALMERS	FORD
BRIGGS & STRATTON	I.H.C.
CASE	MASSEY-HARRIS- FERGUSON
CLINTON ENGINE	MINNEAPOLIS-MOLINE
COCKSHUTT	OLIVER
DEERE	WISCONSIN MOTORS
EARTHMASTER	

# VICTOR

Sealing Products Exclusively

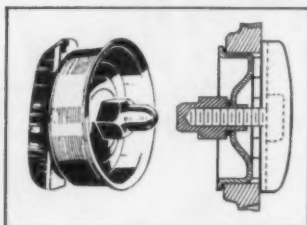
## GASKETS • OIL SEALS • PACKINGS

The 100% Coverage Line—for Cars, Trucks, Tractors, Stationary Engines

## 621—Core Plug

Employing a patented anchor screw construction that enables installation in two simple steps, the "Anchor Seal" core hole plug introduced by Houser Engineering & Mfg., Inc., P. O. Box 149, Bluffton, Ind., is a "cup-shaped" plug that is inserted into the core hole for a closer, tighter, permanent repair.

No special tools are required for installation, which reportedly may be



made in 15 minutes. First, mechanic slips the anchor into core hole, tightens the nut with fingers until cup starts into the hole. Second, he tightens the nut until the flange on the cup compresses the neoprene "O" ring to a thickness of approximately 1/32" thick. Soft copper washers prevent leakage around anchor stud, it was claimed. Removal of starter, generator or exhaust manifold is unnecessary. One hole plug fits various models of Chevrolet, De Soto, Dodge, Kaiser and all Plymouth passenger cars and some Dodge trucks.

Want more info? Use coupon on page 121 and you will get it!

## 622—Plastic Sealer

To rebuild and repair worn and dangerously smooth bus and truck stair treads, "SP-10" plastic sealer introduced by Baird Dynamic Corp., 1700 Stratford Ave., Stratford, Conn., can be brushed, poured or troweled on, reportedly providing a non-skid, long-wearing surface which securely seals steps and step wells against moisture, rust or seepage.

Product may also be used to repair damaged concrete, fill cracks in cement, seal to prevent water seepage and rust, create safe, non-skid surfaces by adding abrasives, build up worn high traffic areas and to secure and embed conduit, cable or lighting installations in concrete, according to the manufacturer.

Want more info? Use coupon on page 121 and you will get it!

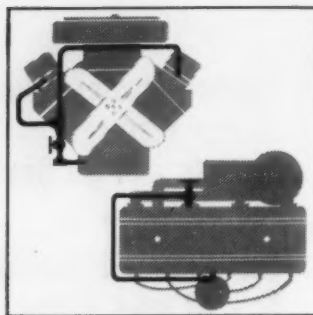
## 623—Filter Catalog

Complete to the point of including engine air CFM requirements, its 1961 engine air filter specifications catalog published by Fram Corp., Rumford Post Office, Providence 16, R. I., includes complete size and performance characteristics of more than 125 dry-type, pleated paper air filters.

Want more info? Use coupon on page 121 and you will get it!

## 624—Oil Line Kits

Designed to perform to factory specifications, 2 simple rocker arm oil line kits introduced by E. Edelmann & Co.,



2332 W. Logan Blvd., Chicago 47, Ill., provide an external oil flow through rocker arm shaft and overflow for excess oil to overcome and prevent noisy rocker arm and pull rod operation on Fords and Chevrolets.

Easily installed for properly restricted exterior oil supply to each bank, they quiet noisy rocker arm operation altogether, it was claimed. In case of clogging, lines are easy to clean, the manufacturer said. Remove a fitting, clear the line and replace the fitting. All fittings reportedly give leak-proof protection. Kit "No. 497" fits Ford 272 and 292 V-8 engines from 1954 through '61. "No. 496" fits Chevrolet 6-cylinder engines in models from 1953 through '61. Each kit is packed in heat-sealed polyethylene bag and individual box, clearly identified for quick selection.

Want more info? Use coupon on page 121 and you will get it!



# NOW! CHRYSLER'S NEW STARS ON THE HORIZON

Introducing  
the Car Care  
Line with  
**SOMETHING  
EXTRA!**

Here are the first in a complete line of automotive chemicals, designed and engineered by Chrysler Corporation—for all makes of cars.

A quality line with everything—merchandising, advertising support, a planned sales program, **PLUS** that **SOMETHING EXTRA**—the increased trade acceptance of products bearing the name of a major automotive manufacturer.



CYCLEWELD CHEMICAL PRODUCTS DIVISION

Sold through  
warehouse distributors and jobbers exclusively

**CHRYSLER  
CORPORATION**

TRENTON, MICHIGAN



### 625—Safety Belt

Made of heaviest grade close-knit nylon webbing, with a proven tensile strength in excess of 5,000 lbs., "Safe-master" automobile safety seat belt announced by The Greenfield Co., 4417-19 W. Rice St., Chicago 51, Ill., is said to be quick and simple to install, requiring no special tools.

Buckle is designed to grip securely, yet release instantly, it was claimed. "Clamp Grip" twin hook attachment holds belt securely to car floor. Belt adjusts to fit any person—adult or child. Buckle and fittings are chrome-plated.

Want more info? Use coupon on page 121 and you will get it!

### 626—Compact Cushion

A full-width 56" springy wire seat cushion announced by Ace Rubber Co., P. O. Box 6147, Dallas 22, Texas, reportedly will fit all domestic compact and some foreign cars.

"No. 714" is available in blue, black, green and red plastic impregnated fab-



rics, contoured over interlocking 1/2" rust-resistant coiled wire said to provide full headroom while retaining original resiliency and shape. To hold position, an elastic band fits around back of seat.

Want more info? Use coupon on page 121 and you will get it!

### 627—Air Conditioner

Designed especially for compact cars, the "Sportsman Mark IV" air-conditioning unit announced by John E. Mitchell Co., 3800 Commerce St., Dallas, Texas, reportedly permits greater leg-room in small cars.

Stationary "depth-flow" louver affords more efficient direction of cold air to the back seat, it was claimed. Squirrel-cage blowers move up to 240-cfm, reportedly fully adequate for compacts, but not recommended as sufficient for larger cars.

Want more info? Use coupon on page 121 and you will get it!

### 628—Metric Hex Key Pack

A handy and necessary tool for work on foreign cars or engines where socket screws are used is the metric hex key pack designed by K-D Tool Co., 526 N. Plum St., Lancaster, Pa.

The "K-D 45" pack contains 6 popular sizes—2mm, 2 1/2mm, 3mm, 4mm, 5mm and 6mm. All are mounted in a sturdy metal pocket case, 3 3/4" long folded. The case is assembled with bolts so that keys may be easily replaced. Other sizes are also available, according to the manufacturer.

Want more info? Use coupon on page 121 and you will get it!

## Lifting Equipment for Every Service Need

For Faster, Easier Service Lifting...

# FLEET

## Hydraulic and Air-powered ONE-END LIFTS



No. 5-41  
Hydraulic

No. 5-44  
Air Powered  
(with high  
lift attachment)

Transmission adapter for  
Model 5-41 handles all car  
and light truck transmissions

The handiest service jacks made. Take your choice of manual-hydraulic operation or air powered from your shop line for fast, safe, easy one-end lifts. Lifts all cars at points recommended by manufacturers. 1 1/2 tons capacity. High lift attachments for both models.

\* Big 10" semi-pneumatic tires standard at no extra cost!

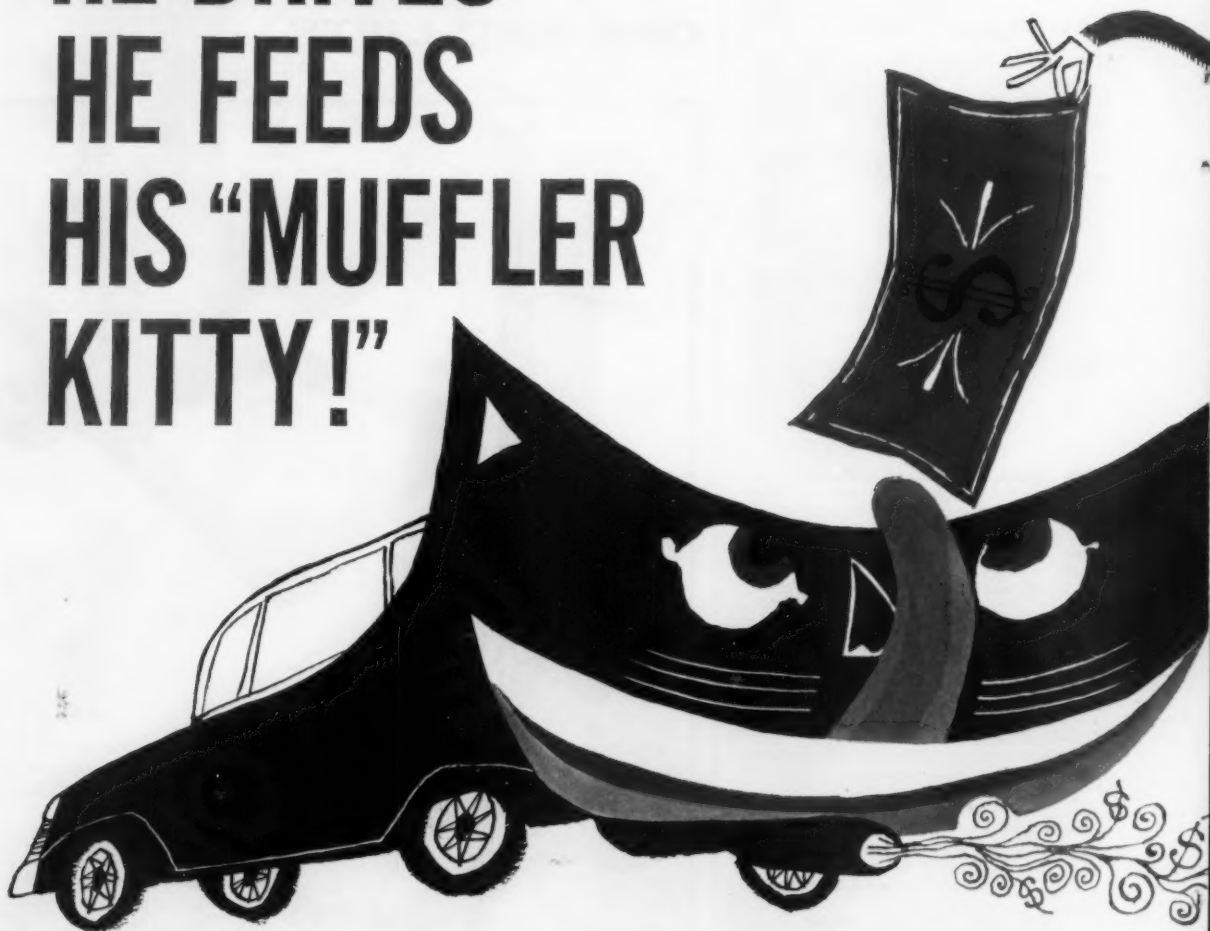


## EDGEWATER AUTOMOTIVE DIVISION

SAINT JOSEPH, MICHIGAN

*what do you mean—"Just as good as Walker?"*

# EVERY MILE HE DRIVES HE FEEDS HIS "MUFFLER KITTY!"



**THIS EXCLUSIVE DYNAMOMETER  
"PROVING GROUND" MAKES  
CERTAIN WALKER SILENCERS  
NEVER EXCEED PERMITTED  
BACK PRESSURES.**

This Walker designed outside chassis dynamometer permits actual on-the-car tests under actual accelerated driving conditions.



## Walker "precision tuned" silencers remove power-robbing back pressure ...give engines full built-in performance...save gasoline



When a muffler is not accurately and scientifically designed . . . "Precision Tuned" . . . for the particular engine on which it is installed, *excessive back pressure* can cost the car owner money. Every mile he drives, he contributes to his "muffler kitty." "Back pressure drag" can result in a loss of up to 45 horsepower . . . reduce acceleration time as much as 60% . . . cause sluggish performance . . . increase gas consumption one gallon in ten. That's quite an extra price to pay for a muffler that is *supposed* to be "just as good as Walker"—but isn't.

Walker "Precision Tuned" Silencers demand no "continuing time payments." Every Walker "Precision Tuned" Silencer is scientifically engineered to meet the exact requirements of each individual engine . . . in back pressure . . . in sound control . . . in long-lived rust protection inside where it counts. Walker "Precision Tuned" Silencers never rob engines of full built-in power . . . never steal gasoline . . . never make a car owner "pay through the nose" for months and months to come.

Being "just as good as Walker" is a fine ambition for anyone to have. It's easy to claim . . . but a bit hard to come by . . . because Walker leadership results from years of designing and building exhaust systems as original equipment for most of America's leading automobiles . . . from "compacts" to "luxuries." It results from the finest research laboratory in the industry . . . and the knowledge of "what-to-do" and "how-to-do-it" that comes only with years of pioneering experience.

Don't ask your customers to "pay extra" for a muffler that is supposed to be "just as good as Walker"—but never is. Install the "original"—a Walker "Precision Tuned" Silencer—that keeps engines at *peak power* and performance . . . always . . . that *saves money* at the gas pump . . . and is engineered to *last as long or longer* than any other muffler made.



## WALKER "PRECISION TUNED" SILENCERS

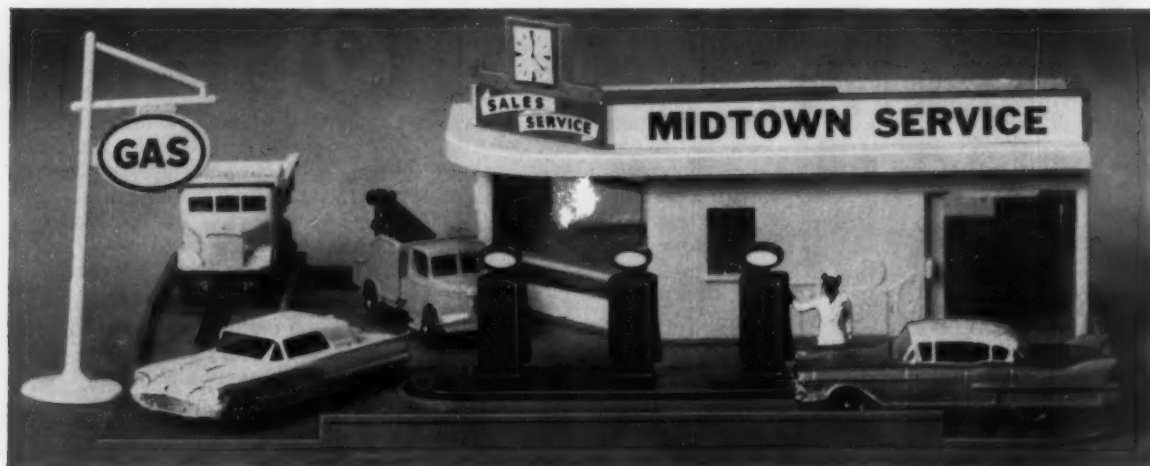
America's most PERFORMANCE PROVED mufflers

LAST LONGER . . . RUN QUIETER . . . GIVE ENGINES NEW PERFORMANCE AND GAS ECONOMY

WALKER MARKETING CORPORATION, RACINE, WISCONSIN



**some stations are quiet . . . some are busy**



## WHAT MAKES THE DIFFERENCE?

**CUSTOMER SERVICE...** like the kind of extra service you give with a Pullman Vacmobile. Customers appreciate stepping in to freshly vacuumed cars... and if you give them this service with every lube, repair or wash job, *They'll Come Back* . . . for gasoline, oil, and all the other services you sell!

And a Pullman Vacmobile is *more* than a goodwill builder . . . it *helps you sell* more high-profit TBA items! Every time you vacuum, you get a chance to check floor mats, interior lights, the spare tire, seat covers . . . all sources of easy, profitable sales.

Powerful, portable Pullman Vacmobile cleans interiors fast . . . gets deep-down dirt like no broom or brush ever can. "Never-Clog" Filter maintains full power, keeps Pullman Vacmobile on the job and trouble-free. Complete set of tools and accessories makes cleaning fast and easy.

**JUST 40¢ A DAY** Puts The Pullman Vacmobile To Work For You! Ask Your Jobber Today!

### These FREE Sales Builders with Every PULLMAN Vacmobile

- 72-pc. "Badge-O-Rama" Kit to boost TBA sales
- Complete accessory kit, including Accordion Hose, Upholstery Tool, and exclusive "Never-Clog" Filter

- Metal Island Sign
- Hangtags



**Pullman**  
VACMOBILE

Pullman Vacuum Cleaner Corp.  
25 Buick St., Boston 15, Mass.

**World's Largest Manufacturer of Commercial Vacuum Cleaners**





Officers of the Texas Independent Garage Owners of America, Inc., were installed at the first state convention held in Paris on March 18 by Ralph H. James of Tulsa, extreme right, executive director of IGOA. Left to right are: Dennis Dickerson, third vice president, Paris; Paul Darnell, national representative, Fort Worth; Fred Bethel, president, Dallas; Bert Cook, secretary-treasurer and the first president of IGOA, Dallas; M. W. Wright, second vice president, Dallas. J. B. Smallwood, first vice president, Fort Worth, was unable to be present.

### Texas IGO to Invite IGOA for 1965

**I**N THEIR first state convention at Paris March 18, members of the Texas Independent Garage Owners of America, Inc., voted to invite the national convention of IGOA to Texas in 1965.

In another action that followed considerable discussion, including remarks from Ralph H. James of Tulsa, Okla., executive director of IGOA, the Texas group voted to express vigorous opposition to any attempt to either move national headquarters of IGOA from Tulsa or rotate the mid-winter meeting.

This group—TIGOA—is affiliated with IGOA and is not to be confused with the older, larger, Independent Garagemen's Association of Texas, which is not affiliated. TIGOA is only about a year old, has only four local chapters, but is making progress. At the Paris convention all four local chapters—Dallas, Fort Worth, Irving and Paris—were represented.

James was principal speaker, said IGOA now has members in 40 states and urged Texas members to supply him with documented evidence of anti-trust violations. He also delivered a prepared address on "How to Increase Your Net Profit with Use of the Customer Budget Plan" and said it was absolutely necessary for garagemen to have access to the facilities of an established finance company.

Each one of these fine cars comes Lucas equipped. For greater profits and more satisfied customers always replace Lucas with Lucas.



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BATTERIES • AIRLINE SHOCK ABSORBERS



## TIME SAVERS

### To Drain Block Amply With Heads Removed

MUCH of the time a block will not drain enough to stop dripping when the heads are removed and car is raised for overhaul.

To stop this aggravation, bend a 20" length of small tubing and insert the short end in the water jacket. Blow past the extended end for about three seconds with an air hose to start siphoning. Works "slick."—Wayne Goodman, 607 Delaware, Wellington, Kansas.

### Converting Bumper Jack Into a Body Jack

ILLUSTRATION shows how a length of pipe can be slipped over the end of a bumper jack to make a body



jack.

By using different lengths of pipe, almost any desired length can be ob-

tained. This idea works well and we have used it to advantage several times. In this case we pushed the door post out on a '55 Chevrolet. —W. M. Horrell, 824 Evelyn Avenue, Louisville 15, Kentucky.

### Using Mounted Motor To Start Mower

ONE of our profit services is the repair of small engines, as in power mowers, etc., and instead of laboriously trying to start them with the pull rope, we have an electric motor mounted on the leg of a workbench.

It's only the work of a moment to slip a V-belt on the motor pulley and the pulley of the mower. Flip the switch and let the electric motor do the hard work. Pulling back on the mower tightens the belt. When

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GREASE SEAL  
ASSORTMENT

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NOW



Order from your jobber!  
Refills packed 6 pair per box. List \$2.40 pair  
WRITE FOR YOUR 1961 CATALOG!

This assortment is carefully balanced to meet your everyday demand! Total of 30 pair is selected from the 12 types that fit nearly all popular cars.

Handy "chek-chart" in lid tells you instantly which seal fits each car make and model.

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**\$7**

## IDEA?

will be paid for every time-saver or shop short-cut accepted for publication in this section. A photo or rough sketch will make your idea more valuable. Only original items, not previously published, offered for our exclusive use, can be considered. Send them to: Southern Automotive Journal, 1760 Peachtree Road, N.W., Atlanta 9, Ga. Rejections cannot be returned.



the machine starts, move the mower forward a bit to slacken the belt, which then comes off.—Harry J. Miller, 991 Forty-Second, Sarasota, Florida.

### Repairing the Lever On Ford Turn Signal

ON ALL late-model Ford cars, the turn signal lever carries a No. 10 x 32 thread, and it sometimes happens that the thread in the "plate"—as the part the lever screws into is called—is stripped or otherwise damaged and a new part is not obtainable.

In such cases, it is often possible to tap the hole in the plate to a larger size, using a machine screw tap No. 12 x 24. Of course, it will be necessary to thread the lever to a corresponding size and thread, but this can be done easily by chucking it in a lathe and turning it down to accommodate a No. 12 x 24 die.—Lynn F. Snoddy, 1622 Vivian Street, Shreveport, Louisiana.

### To Install the Shims In King Bolt Sets

HERE is an easy way to install the shims when replacing king bolt sets:

Cut about 2" off an old pin and taper it slightly. Place shims on top of the axle and put spindle on. Drop short piece in the top and tap the bearing in with a soft hammer. When the pin is driven through, it will drive out the piece. This gives a very tight fit. An extra shim can usually be added.—R. O. Crossland,

803 N. 5th Street, Honey Grove, Texas.

### Localizing Power Ills With Old Ammeter

FOR those shops that repair car radios and don't have an inverter, or whose inverter has no ammeter, the addition of an old car ammeter—even one that is not accurate (fused a little below its full-scale value)—is an invaluable time saver to localize power supply troubles.

The meter is hooked in series with

## TORQUE WRENCHES



### This Mark\* Guarantees:

1. Guaranteed accurate forever within 2% of maximum scale reading.
2. The only wrench that permits accurate use of adapter & extensions. Patented pivoted handle permits concentrated load position—the only way to obtain accuracy with adapters and extensions.
3. Rugged construction. Can be stored in a tool box with other tools.
4. Easy to use as any socket wrench.
5. Signalling models and direct reading styles to choose from.
6. A complete range to choose from to meet every service application.

\*These are the same torque wrenches used and recommended by leading engine and equipment builders.



### Valve and Clutch Spring Tester

Test new as well as used springs. Match sets of valve springs for top engine performance. Check clutch springs to prolong clutch life.

### FREE

Torque Specification Book for over 130 makes and more than 1200 models of automobiles, (U.S. and foreign) trucks, tractors, outboards, motorcycles, diesel, aircraft, marine and small air cooled engines. Spark plug, wheel bearing, valve spring data and many helpful torque tips sent free upon request, write Dept. 408



PA-**Sturtevant** CO.  
ADDISON QUALITY ILLINOIS

the battery or inverter of the 20- or 50-ampere variety, and with a little experience the radio serviceman soon learns the current consumption of the various types of car radios. For instance, here are a number of troubles the old car ammeter will square away in a hurry:

If current is half of the normal value, the B-plus supply is possibly dead. Either the vibrator is inoperative or the rectifier is defective. (Open power transformers are not very common.)

If the current consumption is half

again to twice the normal value, the B-plus supply may be shorted, and if the ammeter shows this abnormally high current as soon as the receiver is switched on, chances are the buffer condenser is shorted. (Our experience has been that shorted rectifiers and shorted transformers are not too common.)

If, however, the ammeter reaches the abnormally high value after the rectifier has warmed up, the B-plus is probably shorted after the rectifier.

If the ammeter indicates a near-

dead short, or at least several times normal current value, it is likely the vibrator contacts are sticking, indicating a defective vibrator. — *Stan Clark, Stanley Clark Service, Box 2162, East Bradenton, Florida.*

### Keeping the Slack Out of Tow Lines

WHEN towing a car with a chain or rope, it is difficult to keep the slack out of the tow line. The front car will sometimes take up the slack too fast, causing a sudden jerk to both cars, or the towed car might sometimes run up against the front car.

All this trouble can be eliminated by slipping a length of pipe over the



chain or rope, leaving enough of the tow line extending from both ends of the pipe to fasten to both cars. — *W. M. Horrell, 824 Evelyn Avenue, Louisville 15, Kentucky.*

### Preventing Bench Damage To Throttle Valves

WHEN overhauling 4-barrel carburetors, much damage can be done to the throttle valves unless some type of fixture is employed to hold them up off the workbench. A simple jig that will work on a number of different 4-barrel models can be made very easily using the base insulator from a '57 Oldsmobile, which comes in a new gasket set, 4 bolts, 5/16" x 2 1/2" long, and 8 nuts.

Screw one nut on each bolt as far down as the threads go, then push them through the holes in the insulator. Put a nut on each of the bolts that extend through the insulator, tightening them and slightly moving them around until the carburetor will fit perfectly. The bolts serve as legs to hold the car-

# now's the time for TUNGSTEN Tune-ups!

**Get out and get under the hood!**

Before they hit the high road, get 'em off to a good start with TUNGSTEN Heavy-Duty IGNITION PARTS!

TUNGSTEN IGNITION PARTS come in individual packages or in handy tune-up kits with specific applications for both domestic and imported cars. Either way, you're assured of top-quality replacements — engineered to play their parts perfectly — priced to produce a handsome profit!

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TUNGSTEN CONTACT MFG. CORP.  
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BUILD GOOD CUSTOMER RELATIONS !**

**ONLY PARTS and MATERIALS THAT CONTRIBUTE  
DIRECTLY TO THIS END SHOULD BE USED**

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as one of their principal tools to insure good, trouble-free functioning of the hydraulic system on their brake jobs.

Operators have learned that they can depend on TRU-TORQUE to insure perfect functioning of the hidden parts in wheel cylinders throughout the life of their brake jobs.

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**BOND-TITE**

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# HOW TO COMPLY WITH NEW ICC SAFETY REGULATIONS

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You can save countless hours and avoid costly errors with Arrow's new ICC Fleet Kit. Large illustrated diagrams, simplified instructions, charts for computing changes and additions for each vehicle, cost estimating forms, wall charts and other important data are included in the kit.

Whether your fleet has 5 or 500 units the kit will be a valuable working tool. The new ICC Safety Regulations are effective July 1, 1961. Get your free kit **today!** See your jobber or simply attach this page to your letterhead and mail direct to Arrow Safety Device Company, Georgetown, Delaware.



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HAVE NOT  
TRIED THIS  
TEST ... SEE  
YOUR ARROW  
JOBBER...YOU'LL  
BE AMAZED!**

**ARROW**  
DESIGNS WITH THE FLEET IN MIND

buretor off the bench, making it easier to overhaul without damaging throttle valves and linkage.—*Russell Weaver, Mechanic, Argabrite Chevrolet-Oldsmobile Company, 214 North Green Street, Henderson, Kentucky.*

### Making a "Pusher" For Service Truck

**O**N SERVICE calls resulting from battery failure or an empty gas tank, the customer's car usually needs a push to get it started when the condition is corrected.

To make this kind of a push a



"gentle" one which won't damage the stalled car, bolt an extra bumper made of thick planking to the regular bumper of utility service truck. This makes the bumper both low and high enough to contact the rear bumper of any car from the smallest compact to the largest high-wheeled sedan.—*Glen F. Stillwell, 340 Ninth Street, Manhattan Beach, California.*

### Making Transmission Crossmember Repair

**W**HEN replacing the transmission crossmember of 1957-59 Ford cars, sometimes the threaded nuts in the frame break out of their factory-made holes and fall down in the frame.

Instead of leaving the bolt out, drill a  $\frac{3}{8}$ " hole in the outer frame and insert a  $\frac{3}{8}$ " tie bolt through both sections of the frame and crossmember, then double nut the tie bolt. This makes a tight fit and a strong, neat job.—*Jimmy Martin, c/o Ray Martin's Garage, Hartshorne, Oklahoma.*

### Walker Dies in Mobile

Homer Clyde "Mickey" Walker, 60, former partner in a Chrysler agency in Mobile, Ala., died sudden-

ly last month. A native of Coosa County, Walker moved to Mobile about 40 years ago. He had been manager of a number of automobile sales companies.

### Rubberized Asphalt Gives Safer Roads?

**A**DDITION of special rubberizing compounds to asphalt produces sturdier, safer roads at less cost to the taxpayer, according to H. A. Endres of The Goodyear Tire & Rubber Co.

The rubber industry, Endres said, has devoted 20 years to a research and testing program "to determine if the addition of rubber in proper form to asphalt would produce a superior material for road surfacing." The advent of petroleum-derived synthetic rubbers made it possible to "custom-make" rubber for this specific use, he said.

Addition of rubber in amounts as small as one part rubber to 99 parts asphalt strengthens the asphalt, giving it resilience, a stronger grip on cover stone and makes it less brittle in the winter and less sticky in the summer, Endres said. Reducing the "bleeding" makes roadways less slippery and therefore safer for the driver, it was pointed out.

The material consists of 40% specially selected butadiene-styrene rubber, co-precipitated with a finely divided mineral carrier, micronized sericite mica.

The concentration of rubber in asphalt need not exceed three per cent to develop the desired properties, Endres said. Rubber in suitable form, he said, can be added to hot asphalt (300-400°) while the latter is being agitated. The agitation is continued until the proper degree of dispersion is obtained.

Nearly 2,000 miles of rubberized roads are now in use across the nation.

### Tempest Buyers Like Four-Cylinder Jobs

**B**UYERS of Pontiac's Tempest have shown an overwhelming preference for the four-cylinder engine, with 98% choosing the economical powerplant that ranges from 110 to 155hp.

The Tempest four is basically identical to Pontiac's V-8 engine with the left-hand cylinder bank removed, according to the company. The smaller engines are available in either low- or high-compression versions, with a choice of automatic and synchromesh transmissions. A four-barrel, high-compression engine, rated at 155hp, is optional.

**SPECIAL FOR 1961**

# GENERAL MOTORS

**CARS WITH WELL-TYPE FLOORS**

**New Easy-Lift, Easy Clean Mat Protectors**

## ACE GLAM-R-TWINS

FOR  
CADILLAC  
CHEVROLET  
OLDSMOBILE  
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**ACE**  
*Sets the Pace*

Sell this glamorous pair of mats to every owner of a 1961 General Motors car. They were designed especially for custom fitting of the new 1961 sunken floor contours. Also, universal fitting for '59 and '60 models of same makes. Note the beautiful sweeping arc design, deep pile carpet textured "live" rubber, corner grips for lifting and emptying without spilling and the sparkling silver mylar door-step plate. They sell on sight. Order your stock now!

**At Better Jobbers Everywhere**

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# CHAMPION'S BIG CONTEST

## Win your own airliner and crew for 2



Plan your own trip—anywhere in North America! See the places you've always wanted to see! You can take along your family and friends—up to 12 people in all. Spend the \$5,000 as you please! All plane expenses are paid—and all tax is paid on the first prize!

### YOU CAN WIN 1,159 OTHER VALUABLE PRIZES!



**COMET  
2-DOOR SEDAN**  
Equipped with heater,  
whitewall tires.



**FALCON  
TUDOR SEDAN**  
Equipped with heater,  
whitewall tires.



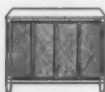
**LARK  
2-DOOR SEDAN**  
Equipped with heater,  
whitewall tires.



**RAMBLER AMERICAN  
2-DOOR SEDAN**  
Equipped with heater,  
whitewall tires.



**2 LONE STAR  
15-FT. RUNABOUTS**  
With trailer, up-to-40 hp  
outboard motor.



**11 STROMBERG-  
CARLSON CONSOLES**  
Stereo hi-fi phono,  
AM-FM radio.



**35 BELL & HOWELL  
MOVIE CAMERAS**  
8 mm., automatic  
electric eye.



**156 EVANS BICYCLES**  
Interceptor 300 model,  
boy's or girl's styles.



**250 COLEMAN  
CAMP STOVES**  
Lightweight, clean-  
burning, durable.



**700 COLEMAN  
PICNIC COOLERS**  
Well-insulated,  
lightweight.

CHAMPION SPARK PLUG



IS ON NOW!

# weeks—plus \$5,000 spending money!

HERE'S HOW CHAMPION IS HELPING YOU EARN  
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Champion Spark Plug Company offers you the trip of a lifetime!

**Win your own airliner and crew for 2 weeks ...plus \$5,000.00 spending money!**




Plan your next trip anywhere in North America! Save along your family and friends—up to 10 people in all. There are no expenses and \$5,000 spending money. All you need is your prize. Nothing to buy! Enter at your favorite service station or dealer or group.

It's easy! Simply say: "I'll check my plugs!"

**WIN YOUR OWN AIRLINER AND CREW FOR 2 WEEKS!**

PLUS \$5,000.00 SPENDING MONEY—TAX PAID!

1159 OTHER PRIZES

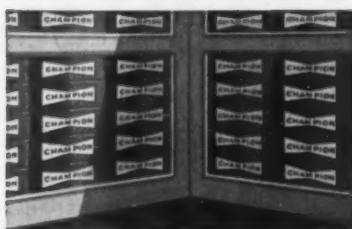


CHAMPION

The big 2-page ad shown above is appearing this month in over 65 million copies of America's leading magazines—reaching 9 out of every 10 car owners! It will open the door to prizes and profits for you. This ad appears in *Life*, *Look*, *Saturday Evening Post*, *Reader's Digest*, *This Week*, *Parade*, *Popular Mechanics*, *Popular Science*, *Mechanix Illustrated*, *Hot Rod*, *Motor Life*, *Motor Trend*, *Road & Track*, *Farm Journal*, *Farm and Ranch*, *Progressive Farmer* and *Successful Farming*.

If you haven't already received your Champion Contest Kit with this eye-catching window banner in it, ask your Champion supplier to see that you get one. Put the banner in a prominent spot, where it can tell every motorist, "Enter Here!" Remember—the more plug checks you certify, the more chances you have of winning. (You can win more than one prize.) And the more spark plugs you check, the more you increase sales and profits!

HERE'S HOW YOU CAN INCREASE YOUR CHANCES AND YOUR PROFITS



## 1. HAVE AMPLE STOCK OF CHAMPIONS

Experience shows checking spark plugs always leads to increased sales, so make sure you have plenty of Champions on hand. (You can cover 95% of cars on the road with the 9 basic plug-types in Champion's Utility Line.)



## 2. HAVE TOOLS FOR EASY PLUG CHECKING

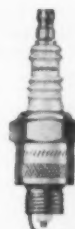
The best and easiest way to check spark plugs is right in the engine—with the Champion Plug-Scope! And the Plug-Master wrench and magnetic Plug-Mate socket make plug installation and removal faster and easier.



## 3. URGE EVERY CUSTOMER TO ENTER

Use the helpful hints in your plans book to improve your customers' (and your own) chances of winning! The more entries you certify, the better your odds. And remember—plug checking leads to increased sales of spark plugs and other parts and service!

• This contest closes May 31. By then, 1,160 lucky motorists will each have won a valuable prize. And 1,160 identical prizes will be awarded to the alert dealers who certified their spark plug checks. You could be the duplicate winner of the grand prize—your own airliner and crew for 2 weeks, plus \$5,000 spending money—all tax-paid! And you'll certainly increase your sales and profits with this great Champion contest. It's your chance of a lifetime!



DEPENDABLE  
**CHAMPION**  
SPARK PLUGS

COMPANY • TOLEDO 1, OHIO

**NATIONAL**  
helps you sell with  
promotional  
aids  
like these —

Attention —  
getting metal  
signs for  
outdoor display



Attractive multi-  
colored indoor  
wall or counter  
signs



Attractive  
work caps



and colorful modern  
packaging, too . . .



The NATIONAL distributor in your area will be glad to supply you with these and other popular merchandising aids — and show you how to get a bigger and better deal with the National Bonded Brake Shoe Exchange program. Write us now for his name!

Distributors: Several territories still available.

**NATIONAL**  
**BRAKE BLOCK COMPANY**  
SINCE 1919  
37-17 57th Street, Woodside 77, N. Y.



President West

### South Carolina Dealers Elect West President

NEW president of the South Carolina Automobile Dealers Association is T. V. West of Columbia and Georgetown, immediate past president of the State Chamber of Commerce.

Other officers include regional vice presidents Sam W. Jones of Columbia, Dave W. Rodwell of Georgetown, J. Guy Sullivan of Anderson, H. A. Hunter of Conway, J. Henry Sitton, Jr., of Greenville, and C. B. Morgan of Orangeburg. Woodrow H. Taylor of Batesburg is secretary-treasurer and James W. Pickens of Orangeburg is the National Automobile Dealers Association director.

In addition to officers, directors named at the recent annual business meeting in Columbia are: James N. Pulliam of Columbia, F. S. McWhirter of Lancaster, Robert T. Clarke, Jr., of Columbia, F. B. James of Charleston, Roy E. Smith of Beaufort, Joe F. Westbrook of Georgetown, W. H. McElmurray of Aiken, George W. Ballentine of Greenwood, J. Mac Segars of Hartsville, Dave Lineberger of Kingstree, O. D. Smith of Florence, W. K. Caldwell of Dillon, W. Deck Hull of Spartanburg, J. T. Neely, Jr., of Rock Hill, J. A. Cochran of Chester, Russell Bennett of Cheraw and R. E. Gressette of St. Matthews.

West, who was recently elected president of the South Carolina Business Development Corp., succeeds C. C. Goodwin of Sumter.

In March 1959 West moved from Georgetown to Columbia in order to be more centrally situated for the management of his varied businesses in the state.

Following his early years in Gilmer County, Georgia, West moved to Atlanta. In 1928 he joined General Motors Acceptance Corp., beginning a career in the automotive

business which has covered more than three decades. During his 12 years with GMAC, he was first in Atlanta, then in Columbia, S.C., and finally in Charlotte, N.C.

After moving to Georgetown, West developed numerous business interests in addition to West Chevrolet Co. These include Southern Finance Co., Inc., Georgetown; Strand Chevrolet Co., Myrtle Beach; South State Chevrolet Co., Chester, and Cochran & West Realty Co., Chester. He also purchased and developed commercial property in Georgetown and operated a cattle farm near there.

### Fauquier Picks Moffett

The Fauquier County (Va.) Automotive Dealers Association has elected Frank Moffett of Warrenton Supply, Warrenton, president. Other officers are R. L. Wilson of Wilson Motor Co., Catlett, vice president, and Mrs. George Downs of New Baltimore Garage, Warrenton, secretary-treasurer.

**Seven bucks await your original time-saving shop ideas. Details appear on page 141 of this issue.**

**24" TURF RIDER  
TRACTOR TYPE  
MOWER**

HEAVY DUTY  
DECK

LIST  
**\$99<sup>50</sup>**

With  
differential  
optional.

With forward, neutral and reverse gear box. Has dead man clutch. 3 H.P. engine. Send for free catalog on aluminum and steel deck quality power mowers, all types.

**UNIVERSAL "BLUE-CHIP"  
COUNTER SALESMAN**

Here's your chance to "CASH IN" on the fast growing demand for top quality replacement parts.

The OVER 200 ITEMS in this UNIVERSAL "BLUE-CHIP" display provide replacement parts for 95% of all mowers. Display contains 30 blades, 12 clutches, 35 blade bushings and 124 bolts, keys and washers.

Total retail value—No. UBRC-200.....**\$149.55**  
100 ITEMS—No. UBRC-100.....**\$ 79.05**

**ATTRACTIVE DEALER DISCOUNTS**  
Send for Complete Parts Catalog

**KEEN**

VI 2-6858

**MANUFACTURING  
CO., INC.**  
222 WEST 3RD STREET  
KANSAS CITY, MO.



Who but the Lark Dealer has compacts with the unique new Skytop sunroof...in four models? Who but the Lark Dealer can offer a compact convertible, too? Who but the Lark Dealer has the new 113 in. wheel-base luxury compact with as much inside room as the biggest American cars made? Who but the Lark Dealer has compacts in both 2 and 4 door wagons, 6 or V-8? Who but the Lark Dealer can make every prospect happy with not 2, not 4, but 7—count 'em—7 body styles?

**GROW ALONG WITH THE COMPACT MARKET—COMPACTS MAY TAKE 50% OF ALL '61 CAR SALES! REMEMBER—YOU SELL EASIEST WHEN YOU SELL THE FINEST—**

THE '61 **LARK**<sup>2</sup> BY STUDEBAKER

ASK FOR THE DETAILS OF OUR SPECIAL NEW DEALER ASSISTANCE PROGRAM  
Dealer Development Division, Studebaker-Packard Corp., South Bend 27, Ind.  
Gentlemen: Please send me the facts—in strictest confidence—no obligation.

NAME \_\_\_\_\_ POSITION \_\_\_\_\_  
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CITY \_\_\_\_\_ STATE \_\_\_\_\_

SAJ 4-61 T 8

is our business **HOUSER** ENGINEERING & MFG., INC.  
BLUFFTON, INDIANA

**TENSIOLIN** valve spring



Among the 1961 Pontiac's options is a detachable luggage and utility lamp which can double as an emergency light during a stop at night on the highway. Lamp's 17' wind-up cord will deliver light to any point around car.

### Vehicle Inspection Need Covered in Booklet

**C**O-PUBLICATION of a booklet, "Why Motor Vehicle Inspection," has been announced by the American Association of Motor Vehicle Administrators and the Auto Industries Highway Safety Committee.

In one section pointing out the need for inspections appears the fact that the average death rate in states not now requiring periodic examinations of vehicle condition is 13% above the national average of deaths per 100,000,000 vehicle miles of travel. The booklet also covers, briefly, how motor vehicle inspection programs are implemented, the items of the vehicles which need to be inspected periodically and the program's effectiveness in helping prevent trouble before it happens.

Copies are being distributed to members of state legislatures by the

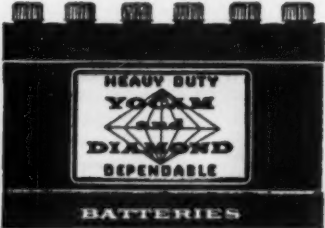
President's Committee for Traffic Safety in support of its "Action Program" for traffic safety.

### Martin Succeeds Pistor With S-P at Memphis

**L.** Roy Martin, 49, has succeeded L. Robert M. Pistor as Memphis zone sales manager for Studebaker-Packard Corp., a position which the latter held for the past five years.

Martin, who formerly served in the Memphis zone, for the past two years had been district sales manager in New Orleans. Prior to joining Studebaker in 1955, he held both retail and wholesale sales positions with automobile companies and was associated with Commercial Credit Corp. for 15 years. The Memphis zone includes western Tennessee, Arkansas, Louisiana and eastern Oklahoma. Pistor has been named New York zone sales manager.

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**WE OUTSELL . . . BECAUSE  
WE OUT SERVE**

**DIESEL  
MARINE  
INDUSTRIAL  
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# Get this G-E MAGNETIC "GRIP-STICK" FREE\* fish small parts and tools from hard-to-get-at places



**\*Get it free from your General Electric headlamp supplier with one case of #4002 G-E headlamps and one case of any other G-E headlamps**—You pay just the regular price for the 2 cases of headlamps. You don't pay for the "Grip-Stick" out of hard-earned profits. The "Grip-Stick" is in specially marked cases of 4002's. Get one while they last.

More of your customers are driving four-headlamp cars. So be prepared to cash in on this rapidly growing replacement business. Stock up now. And while you're at it, remember that one out of ten of your customers needs a new rear light so get a supply at the same time.

**A big replacement market** is still on two-headlamp cars, too. And to help you get a big share of this market, General Electric is running a full scale campaign in national magazines this spring. Take advantage of it, and suggest to your customers that they buy *two* G-E SUBURBAN Headlamps when they come in with *one* burnout. General Electric Company, Miniature Lamp Department, M-114, Nela Park, Cleveland 12, Ohio.

*Progress Is Our Most Important Product*

**GENERAL  ELECTRIC**

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... AND HIS  
**WINNING ACES!**

**CHEMBOND Patches . . . for chemical repairs. Light weight and flexible with extremely tapered edges. Designed for hot or cold application. Three round and two oblong sizes to repair most injuries.**

*\*Specially formulated CHEMBOND Cement is the perfect vulcanizing activator for ACE — or any chemical patch.*

Workbench Dispenser holds an assortment of CHEMBOND materials available and clean from dirt and grease. Contents: 120 small round, 30 medium oval, 30 small oval, 20 medium oval, 1/2 pt. CHEMBOND Cement, Buffer-Stitcher — all that is necessary for an ACE-perfect repair job.

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Stock Krylon, the modern pushbutton line, and watch it move! A wide variety of spray paints and other products your customers need and look for—smart package design and display loaded with eye-appeal for impulse sales. See for yourself how one Krylon sale leads to another—and another! Phone your jobber today!

**IF YOU PRIZE IT . . . KRYLON-IZE IT!**



KRYLON, INC.

NORRISTOWN, PA.



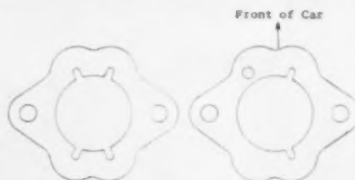
## Improving Fuel Economy On Plymouth, Valiant

**S**HOULD a complaint of poor fuel economy or performance be encountered on the 1960 or 1961 Plymouth six-cylinder or Valiant cars, a bulletin issued by Plymouth advises:

An inspection should be made to determine if the correct gasket is installed between the carburetor and the intake manifold before attempting any mileage tests or tune-up procedures.

On 1960 Plymouth six-cylinder and 1960 Valiant engines, two gaskets, part No. 1630472 (left in sketch), must be used between the carburetor and intake manifold. The use of one gasket will affect fuel economy and prevent proper choke operation. *Note:* In production these gaskets are usually stapled together.

All 1961 Plymouth six-cylinder and 1961 Valiant engines, including those equipped with the closed

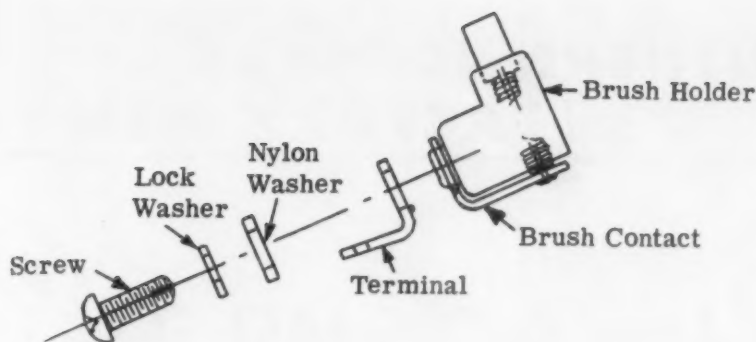


crankcase ventilating system, use gasket, part No. 2205582 (right in sketch).

When gasket, part No. 2205582, is used, the gasket must be positioned on the manifold as shown in sketch.

W. Sterling Edwards, Jr., a Chevrolet dealer of Birmingham, Ala., was presented The Saturday Evening Post's Benjamin Franklin Quality Automobile Dealer Award for "citizenship, community service and outstanding contribution to the automotive industry" during the Automobile Dealers Association of Alabama convention in Biloxi, Miss., last month.





### Alternator Reassembly Cited by Plymouth

**S**HOULD it become necessary to disassemble a Chrysler Corp. alternator, a bulletin issued by Plymouth Division cautions:

It is important when reassembling the unit to make certain the field (insulated) brush is properly assembled.

If the nylon insulating washer is inadvertently assembled between the brush contact and the field terminal, battery current from the voltage regulator will short-circuit directly to ground through the brush holder screw and the end shield. This will result in a blown in-line fuse or internal fuse wire and may possibly damage the voltage regulator.

The brush holder, brush, field terminal, nylon insulation washer, lock washer and screw must be assembled as shown in the sketch above.

### Replacing Fusible Wires On Chrysler Products

**C**HRYSLER Corp. alternator voltage regulator, part No. 2095700, used on late-production 1960 Valiant and 1961 Plymouth, De Soto and Valiant cars incorporates an internal fuse, which consists of two replaceable fusible wires to provide better protection against possible corrosion than the "in-line" fuse.

Should it become necessary to replace either of the fuse wires, a bulletin issued by Plymouth recommends this procedure:

1.—Locate and correct the condition which caused the fuse wire to melt.

2.—Cut off blown fuse wire above the soldered connection at the rivet on the regulator base. Unwind the remaining fuse wire at the contact bracket.

**Caution:** Do not attempt to unsolder the blown fuse wire at the rivet as damage to the very fine

voltage coil wire may result.

3.—MoPar fusible wire package, No. 2275242, contains 24" of fusible wire and is available from usual source of MoPar parts. Tin one end of such wire with rosin core solder. Hold tinned end in the recess of the rivet against the remaining old fuse wire. Place a drop of solder on these wires.

4.—After allowing the soldered connection time to cool sufficiently, pull the wire up and wrap it around the contact bracket. Solder the coiled wire to the bracket and cut off the surplus wire.

**Note:** It is important to solder the

fuse wire to the contact bracket to insure a good electrical connection.

### "Pride or Profit?" Is Kansans' Theme

**W**HAT Are You Working for—Pride or Profit?" was to be the subject of a panel discussion highlighting the 30th annual convention of the Kansas Motor Car Dealers Association April 12-13 at the Lassen Hotel in Wichita.

Will G. Price of Price Auto Service Co., Wichita, was to moderate the panel and other panelees were to be Charles Spencer of Spencer Auto Service Co., Wichita; Dale Sharp of Dale Sharp, Inc., Topeka, and Bert Collard, Jr., of Collard Chevrolet Co., Leavenworth.

Guest speakers scheduled include Walter B. Cooper of Fort Collins, Colo., president of the National Automobile Dealers Association, and Dr. Kenneth McFarland of Topeka, a lecturer.

Hospitality open houses were to be held by automobile manufacturers, finance and insurance companies, oil refineries during the convention, which attracts several hundred dealers and other industry people annually.



### Spray Away Problems the MIRACLE POWER® Way

For rebuilding engines, assembly or service jobs, try the dry graphited lubricant used by the U. S. Navy, Air Force, RCAF, major airlines . . . by leading car makers and engine rebuilders.



One of 29 Miracle® products for fast retail sales . . . service shop use . . . engine tune-up and rebuilding.

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## SOUTHERN JOBBERS and FACTORY MEN

# Dallas Opens Arms to '65 IASI Show

DALLAS is entirely capable of providing "adequate and suitable facilities" for the 1965 International Automotive Service Industries Show, according to Yancy Robertson, president and chairman of the executive committee of the Southwest Automotive Show.

Robertson, partner in the automotive wholesaling firm of Robertson and King, Dallas, made the comment early in March after being advised of tentative selection of Dallas. The information reached Robertson in time for him to announce the decision of presidents of MEMA and ASIA to a meeting of Automotive Booster Club, Southwest No. 4, where he was principal speaker on Feb. 25.

"In respect to exhibit facilities, there are two or more possibilities," said Robertson.

"We now have our 'Market Hall,' which accommodates some of the biggest merchandising events in the Southwest. It is only a ten-minute ride from downtown Dallas. This 'Market Hall' is to be enlarged to become the 'Master Market Center' and

By **BARON CREAGER**  
Southwestern Editor

is expandable to 600,000 square feet of floor space. It will then be one of the nation's major exhibit halls.

"Then there is the Dallas 'Memorial Auditorium,' municipally-owned, and city authorities are now discussing an extensive expansion for this property. It is quite possible that either one or both of these exhibit areas will be expanded before time for the 1965 show."

Robertson was equally optimistic about hotel facilities. He pointed out that in addition to established hotels, two new ones will be completed before 1965, one in the industrial area where 'Market Hall' is situated. In the same industrial district is a huge motor hotel with complete restaurant facilities and nearby—nearer than downtown hotels—are other top motels, sometimes preferred when quality is available, Robertson said.

In addition to his Southwest Show office, Robertson is currently presi-

dent of the Automotive Wholesalers of Texas. He will continue as Southwest Show president until date and site of the next show are selected.

### FTC Tire Ruling Heartens ASIA

AUTOMOTIVE Service Industry Association representatives have expressed gratification over the Federal Trade Commission's decision outlawing contracts by which tire manufacturers pay sizable commissions to major oil companies to promote their tires, batteries and accessories.

J. L. Wiggins, executive vice president of the association, said: "We in the automotive service industry are gratified at the commission decisions. We were particularly heartened by the commission's findings that the freedom of the service station operators 'to buy and sell as independent merchants is shown to be less complete in practice than in theory.'"

Harold T. Halfpenny, legal counsel, said: "These important decisions finding that the contracts between the large rubber companies and the major oil companies were illegal will allow greater economic freedom and competition to the service station operator, numerous manufacturers and the independent automotive wholesaler. It appears at long last that the anti-trust laws are being used effectively to eliminate illegal, coercive practices used by oil company suppliers and purchasers."

### Shurhit Hires Dashner

R. L. "Pete" Dashner, Jr., has been named sales manager for Shurhit Products, Inc., Waukegan, Ill., Executive Vice President R. E. Grissett announced. Dashner was formerly product sales manager for R-B-M Division, Essex Wire Corp.

Yancy Robertson holds broadside containing illustrations of Dallas' "Market Hall," which is expandable to 600,000 square feet of floor space.







Leaders of VCAWA appear in the front row (l. to r.): John R. Flowers of Hickory, N.C., retiring president; R. G. "Bob" Devlin of Winston-Salem, N.C., the new president; W. C. "Willie" McCubbins of Danville, Va., vice president, and George H. Foresman of Bluefield, W.Va., secretary-treasurer. Two newly-elected honorary members are shown standing (l. to r.): Chauncey W. Stuff of Atlanta, Southeastern field representative of ASIA, and C. Mason Phillips of Waynesboro, Va., a former member and new executive secretary of the Virginia Automotive Wholesalers Association, which was organized last year.

## VCAWA Airs Topics On Current Problems

**A**PPROXIMATELY 70 persons attended the spring convention of the Virginias-Carolinas Automotive Wholesalers Association at Winston-Salem, N. C., last month, featuring the long-time and semi-annual discussion of topics recommended earlier by the more than 50 members composing the group.

General topic chairman was the vice president, R. G. Devlin of Winston-Salem, who was elevated to VCAWA's presidency. Individual topic chairmen were Frank G. McKenzie of Bluefield, W. Va., Mrs. Clara G. Hawkins of Charlotte, N. C., S. B. Norton of Burlington, N. C., John F. Midyette of Richmond, Va., Carl G. Sproles of Bluefield, W. Va., Ned Holland of Greenville, S. C., and W. E. "Bill" Condrey of Richmond, Va.

Speakers on general subjects were Charles H. "Chuck" Davis, executive editor of *Jobber Product News*, Chicago, and William C. "Bill" Herbert, editor of *SOUTHERN AUTOMOTIVE JOURNAL*, Atlanta.

## Death Strikes Twice In Egan Company

**D**EATH struck twice late in February in the ranks of the H. B. Egan Mfg. Co., Muskogee, Okla.

Rudy Copeland of Fort Worth died during the Pacific Automotive

Show in Los Angeles on Feb. 18 and H. B. Egan, founder of the firm, died in a Muskogee hospital on Feb. 21. Copeland was 56 and Egan was 79.

Copeland died of a cerebral hemorrhage not so many hours after he had been presented an appreciation plaque on the previous day by Egan executives. He had been the Egan representative for 26 years and his territory included Memphis, Tenn.; Oklahoma, Arkansas, Mississippi, Louisiana and Texas. Slightly more than two years ago Copeland suffered a heart attack and since then,

The late Rudy Copeland of Fort Worth is shown here, center, holding an appreciation plaque presented the day before his death by Ray T. Lehman, right, vice president and general manager, and Lowell Oden, sales manager, the H. B. Egan Mfg. Co. The late H. B. Egan appears at right.

although active, assigned much of his previous work to the Battle and Davis Sales Co., Dallas, who will continue their representation.

Copeland was a member of AAR, Southwest Group, and a long-time member of Automotive Booster Club, Southwest No. 4, Dallas. However, he admitted to being a Dallas hater in the best Fort Worth tradition, only visited Dallas when absolutely necessary. He always attended the annual TCU-SMU football battle when played in Dallas but, on such occasions, always took his lunch and other refreshments to avoid spending any money in Dallas, he said.

H. B. Egan founded the company that bears his name with proceeds of a \$250 bank loan which was obtained in 1922.

Egan, a native of Missouri, moved to Coweta, north of Muskogee, in 1905 and to Muskogee in 1915. After operating a grocery store and a poultry and egg business, he branched into the automotive parts business as a salesman in 1918, as a wholesaler in 1919 and manufactured other products before getting into the tire repair business.

World War II gave the firm its greatest period of growth and its repair materials moved to U. S. armed forces all over the world by carload. The plant is doubtless the largest devoted to rubber manufacturing in Oklahoma.





Elected in an executive meeting of the 11-man board of directors the night before the one-day convention were these officers of AWO, usual order: Tom Payne, executive secretary, Okmulgee; D. Wayne Sledge, retiring president, Duncan; Tom Moxley, president, Oklahoma City; Jack Rodden, vice president, McAlester; W. J. "Jack" Wing, secretary-treasurer, Guymen. New directors elected are Herman Rector, Okmulgee; John Ketchum, Lawton; R. L. Hahn, Tulsa, and Clarence Biggs, Muskogee.

## One-Day Oklahoma Meeting Draws Record Crowd; Moxley Heads Group

**P**RECEDENTS lay smashed in the wake of the record-breaking sixth annual convention of the Automotive Wholesalers of Oklahoma in Oklahoma City on March 25, where:

Starting with an 8 a.m., two-hour business session, the association compressed this, a seven-hour trade show and an evening of entertainment into a one-day meeting, compared with previous two-day conventions.

Attendance broke all records for the Oklahoma organization, accustomed to light interest. For the first out-of-the-industry speaker of national reputation—Bill Gove, sales consultant from Coral Gables, Fla.—at least 250 men and women found seats and another 50 settled for standing room, most of the audience remaining for the business session.

The trade show became, instead of a booth conference, a full-fledged merchandise show with displays borrowed from local wholesalers and with 70 booths, manned by factory men or factory representatives.

Constitution and bylaws of the association were amended by voice vote to permit election of the 11-man board by mail ballot in advance of the annual convention, thus conserving convention time and making a short meeting possible.

This year's president was plucked from the ranks of the board of directors, whereas progression has been the previous rule. New president is Tom Moxley, Auto Parts and Machine Co., Oklahoma City, also convention chairman and mainly responsible for remodeling the AWO convention. After his election he told the convention it is true that "this association is run by a clique. If you want to be part of the clique, get active. There is a clique in every organization."

Before the election, retiring President Wayne Sledge of Duncan told delegates AWO has grown from 216 members in 1960 to 250 members now.

In his annual report Tom Payne of Okmulgee, executive secretary (and a state senator), reviewed benefits to members from various association services. Then he urged all Oklahomans to urge upon their state senators and other legislators a favorable vote for senate bill 63, which is Oklahoma's renewed attempt to legislate mandatory, annual safety inspection of motor vehicles.

The convention, with all events in one large room in the Municipal Auditorium, closed with a banquet and dance. Earlier, all delegates and exhibitors were association guests at a cocktail party.

## Ramsey Corp. Honors Atkins for 25 Years

**A**RCHIE Atkins of Petersburg, Va., widely known zone manager for Ramsey Corp., subsidiary of Thompson Ramo Wooldridge, Inc., was honored by his company in St. Louis recently for 25 years of service.

Atkins' service with Ramsey, which started in June 1935, was recognized by the presentation of a



watch at a special dinner meeting of the Ramco Old Guard, an employee social and welfare organization. Mrs. Atkins was present as a guest of the company.

Elevated to district manager in 1938, Atkins was promoted to zone manager in 1942. One of his two sons, Robert C., is president of Atkins Automotive Corp., Staunton, Va. The other son, Dr. William M. Atkins, practices medicine in Windsor, N. C. A long-time resident of Virginia, Atkins has lived in Petersburg for the past 14 years.

## MEMA Heavily Favors One Big Annual Show

**O**NE big annual product exhibition a year, annually rotated geographically, is by far the preference of members of Motor and Equipment Manufacturers Association.

General Manager F. J. Lanning announced that of the 327 members who had voted by March 23 on a resolution submitted by request of the MEMA directors, only seven indicated opposition and 320 expressed approval.

The 1962 IASI Show will be held in Chicago and the next national shows, in succeeding years, have been set for Philadelphia (1963), San Francisco (1964) and Dallas (1965), the latter contingent on adequate facilities. Southwest show authorities are confident of that.



Steering Automotive Affiliated Representatives for the coming year will be (l. to r.): Ed L. Lee of New York, executive secretary; George H. MacDonald of Boston, secretary; H. P. "Pete" DeGreen of Chagrin Falls, O., first vice president; Harry C. Younger of Pasadena, Calif., president; Lee A. Bergman of Chicago, second vice president, and William S. Cowan of Minneapolis, who is the treasurer.

## What Is Wrong with the Jobbers? Customers Will Tell Alabamians

**W**HAT's good and what's bad about doing business with jobbers will be aired at Pensacola Beach, Fla., June 26 by the men who should know—the customers.

Executive Secretary John W. Rooney announced that the annual convention of the Automotive Wholesalers Association of Alabama would hear a panel composed of Blaine Brownell of Birmingham, president of the Automobile Dealers Association of Alabama; Ben Mitchell of Selma, president of the Independent Garage Owners of Alabama; Bruce West of Tuscaloosa, president of the Alabama Service Station Association, and the repre-

sentative of a big fleet yet to be chosen.

"This will be a highlight of our convention program and will be designed to enable our members to see themselves as their customers see them," Rooney commented. "We expect the panel to tell the jobbers what they don't and do like about doing business with them, with no punches barred."

A question-and-answer session between the audience and panelists will follow preliminary remarks by each of the latter. William C. "Bill" Herbert, editor of SOUTHERN AUTOMOTIVE JOURNAL, will moderate the discussion.

Newly-elected officers of Automotive Booster Clubs International are (l. to r.): seated, T. H. Everett of Dallas, second vice president; Joe Del Greco, retiring president, who is a council member; Milton I. "Mose" Hudson of Jacksonville, Fla., president; V. C. "Vic" Condron, Jr., of Seattle, first vice president; standing, W. W. Cramer of Chicago, secretary; James F. Boyle of Detroit, treasurer, and W. L. Kroyer and E. C. Abdelnour, council members.



The convention, restricted as usual to members and invited guests, will be held June 25-27 at the 400 Motel. Registration will take place the opening day and the annual banquet and stage show will conclude that Sunday night. The directors' annual meeting will be held that afternoon.

Aside from the 11 a.m. to noon panel discussion the following day, speakers on that work-day program will include Sterling Williams of Birmingham, regional director of the wage-hour board; Travis Williams, chief of the sales tax division of the Alabama state department of revenue; S. M. "Bill" DuBois of Kansas City, Mo., vice president of Universal Underwriters Insurance Co., who will speak on "Insurance You Do Not Have;" Charles H. "Chuck" Davis of Chicago, executive editor of *Jobber Product News*, and J. L. "Jack" Wiggins, executive vice president of Automotive Service Industry Association.

A luau—Hawaiian feast—will be staged that Monday night on the beach.

The following day will be devoted to recreation.

Sam Meadows of Montgomery is president of the association and Irvin F. Siegal of Birmingham is vice president. W. G. "Jake" Woolfolk of Montgomery is the treasurer.

Alabama's is one of the oldest state associations of wholesalers in the nation. This will be the 23rd annual convention.

## Staunton, Va., Company Opens Another Store

**A**FTER 41 years in the automotive parts and equipment business in Staunton, Va., Simmons Parts Co., Inc., has opened a new branch in Charlottesville, W. M. Goodsell announced.

Hollis Proffitt is manager of the new operation and Clyde Hamm is salesman.

## Wix Aftermarket Sales Are Ahead by 15.7%

**A**UTOMOTIVE aftermarket sales for Wix Corp., Gastonia, N. C., as of March 10, were 15.7% ahead of the same date last year, according to Norman Hull-Ryde, sales promotion manager.

Two factors which led to the increase, he said, were "increased drive and determination on the part of our sales representatives" and the most successful spring promotion program in the company's history.



In photograph above Conley Colburn (right), 1960 president of Booster Club B-46 of Lubbock, Texas, is presented the trophy for greatest percentage of increase in membership by Joe Del Greco, retiring president of Automotive Booster Clubs International. At right B. A. Kline (right) of B-37, Oklahoma City, accepts congratulations and awards on behalf of his son, John A. Kline, as "Best Booster Salesman" in his trading area, having been so designated by his jobbers, from Del Greco.



### Proctor of B&D Dies In Atlanta, Ga.

**A**LGERNON Lee Proctor, 57, regional sales manager for Black & Decker Mfg. Co. of Towson, Md., died at his home in Atlanta, Ga., last month following a lengthy illness.

A native of Harrisonburg, Va., Proctor lived in Baltimore, Md., before moving to Atlanta 27 years ago. He had been associated with Black & Decker for 36 years.

### Sharp Joins Knoxville Store

Jay Sharp has joined McNutt & Burks, Inc., Knoxville, Tenn., after ten years' paint and body shop experience—five years as operator of his own shop, according to George W. Kinnie, president. Sharp is in charge of the paint department, calling outside on paint shops. His assistant in paint mixing and filling orders, Herschel Lusby, also is counter salesman.

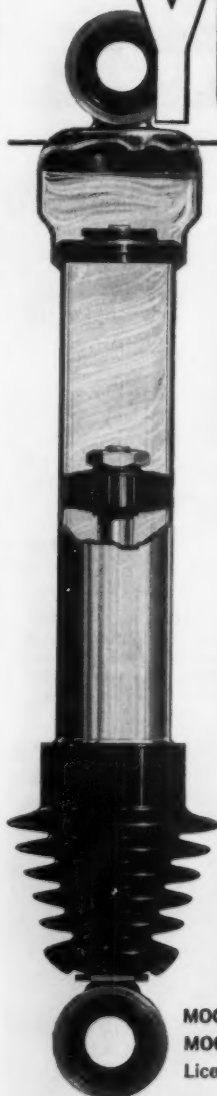
### Orlando Store Moves

Bailey Motor Equipment Co. of Orlando, Fla., held open house and a business show recently at its new home at 805 W. Central Ave. The latest type equipment for automotive, contractor and industrial service field was displayed and demonstrated by factory personnel. Door prizes included a number of automotive tools.

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# YOUR BEST



## Today's hottest shock design.....

First laboratory-tested... now proved in use! This sensational new type of shock absorber solves shock "fade" caused by today's higher speeds and longer trips. Happy customers, far fewer comebacks have made this the shock to watch... the shock to *sell*... in '61!

**THE "FLUID'S ON THE FRAME"** where it gets the same smooth ride as the passengers, instead of the severe shaking of the axle. Minimizes fluid agitation and fluid foaming, even at today's higher speeds! That's why MOOG Shocks never fade, never weaken when the going's rough.

**SAFETY RESERVOIR** locks in air bubbles, prevents them from mixing with shock absorber fluid to assure steady performance throughout today's longer trips.

**EXTRA-LARGE OPERATING BORE** in both MOOG shocks... a full  $\frac{1}{4}$ " larger than competitively priced shocks. This means lower pressure and less wear... extra shock mileage for today's driving.

**TWIN SEALS** provide double protection against fluid loss. Pull out the piston rod, wipe it on your shirt sleeve. See... not a trace of fluid!

**TRIPLE-WELDED MOUNTS** are 50% stronger than conventional welds. Hold up under rugged driving conditions, reduce comebacks.

MOOG COMMANDER (standard)  
MOOG SHOCK-BUOY (premium duty)  
Licensed by DeCarbon



# Mississippians to Meet April 19

**P**ERMANENT officers will be elected at the next meeting of the Automotive Wholesalers of Mississippi, starting with a noon luncheon at the Heidelberg Hotel in Jackson Wednesday, April 19.

Herman Crowder of Crowder Auto Parts, Columbus, temporary president, announced that every jobber in the state was invited to

attend. He asked that any questions about plans for the group, first brought into being at a meeting in Jackson last Dec. 5, be directed to himself or the following temporary officers and directors:

Bill Harwell, vice president, Harwell Distributing Co., New Albany; Frank Bryan, secretary, Bryan-Rogers Auto Parts, Tupelo; Dan

Wiggs, Ripley Auto Parts, Ripley; Clyde Brooks, Brooks-Noble Co., Jackson; Aubrey Galyean, Automotive Products, Meridian; J. Ed Holt, Milton Supply Co., Meridian; Oscar Johnson, Noel's Auto Electric, Jackson; Newton Jones, Jones-Bailey, Laurel; Harold Hart, Hart Supply Co., Columbia; G. B. Landrum, Landrum-Welch, Laurel, and Graham Christian, Christian Auto Supply Co., Laurel.

"These 12 men will be 'stumping' the state asking jobbers to join," said Crowder. "Of course, they will not be able to see everyone, so we want every wholesaler to know that he's invited to come to this April 19 meeting."

"We have seen what the state associations have done for their members in our neighboring states and feel sure that this association can do the same for us. When we get rolling, here are some of the ways in which AWOM will be able to help us:

- "1.—Furnish application forms for employment.
- "2.—Collection service available.
- "3.—Exchange bulletin on ideas and merchandise.
- "4.—Savings on insurance (medical and other).
- "5.—Information service available.
- "6.—Savings on invoices, etc.
- "7.—Working together as a group we can accomplish much more than we can as individuals."

## Delco-Remy Will Add All-Purpose Center

**W**ORK is underway on an engineering and research center designed to provide Delco-Remy Division of General Motors Corp., Anderson, Ind., with ample space in one location for all its product engineering activities, including a department of advanced engineering and extensive laboratory and engineering test facilities, officials announced.

The 225,000-square-foot structure, to be erected on a 40-acre tract southeast of the community on the east side of Road 109 bypass opposite the division's plant 11, will include a three-story building housing engineering administration offices and various product engineering staff activities. A single-story structure will in turn be tied to this building by a two-story service building.

# SHOCK DEAL!

plus **FREE**  
silverware!

... for garages, service stations and dealers!

Each MOOG Shock Assortment #44 includes a coupon good for a complete 5-piece place setting of elegant William Rogers silver-plated dinnerware. A handsome, tarnish-proof storage chest comes as an extra bonus with the fifth assortment. Each assortment contains eight pairs of the fastest selling shock numbers... takes no time at all to build up a complete dinnerware service for eight or twelve!

Contact your MOOG jobber or distributor or write  
**MOOG INDUSTRIES, INC.,**  
6565 Wells Ave., St. Louis 33, Mo.

**MOOG MEANS MORE UNDER-CAR BUSINESS**



# Sales Up Despite Weather

**D**ESPITE tough weather in most areas of the Southland, sales volume the first two months of this year was higher than for the same period of last year, according to 63% of the respondents to a questionnaire mailed to 350 jobbers over the South and Southwest.

Six per cent listed the same sales, while 31% reported a downturn. With a few scattered exceptions, the rises or falls were only a few percentage points. A handful in Maryland and Virginia reported increases as high as 50%, though.

With the better weather anticipated this spring, the wholesalers generally expressed optimism for the remainder of the year. For example, a Florida executive said his sales were down 1½%, "but we expect the balance of the year to easily overcome this."

Collections especially bobbed up in the reports. Always seen sprinkling through the answers, the returns this time were heavily interlaced with

complaints along this line.

A Texan whose gains in sales climbed 17% in January and 11% in February over the same months of last year reported:

"New- and used-car business in this area is in serious trouble. Many dealerships are changing hands or closing out."

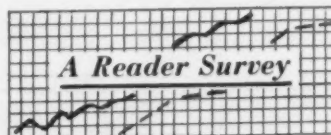
A veteran Florida jobber said his volume was up around 7%. "Collections are very slow, which, of course, keeps volume down," he said. "With a change in weather we expect business to be very good this year."

A Texan listed collections as his toughest nut to crack. He said:

"However, after analyzing the situation we find the problem is of our own making: 1—abandonment of good business practices in our anxiety to obtain sales; 2—laxity in demanding payment when account becomes past due, thereby allowing our customers to get a habit of paying us last and giving our money to our competitor."

"Due to tightening up on our credits, our volume is slightly lower than a year ago. However, we feel our accounts receivable will be more collectible. We are demanding 25% to 33⅓% down payments on extended payment contracts, with a shorter payment period for completion of the contract."

A long-time jobber in Louisville, Ky., blamed "extremely bad weather" and "conditions being what they



are nationally" for his lessened sales.

One of the veterans of South Carolina reported an upturn of 10%. "We don't understand why," he added.

One of the biggest companies, with a number of branches, in the Carolinas reported a rise of 4%.

A Kansas operation of many years' standing found sales had moved up by 11½%.

A Birmingham, Ala., executive said his sales were down 10%. He commented:

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a complete line of more than  
**4000 QUALITY ITEMS**  
currently cataloged...  
offering single source  
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Consolidate your ordering problems, be assured of high quality parts, a good profit margin and prompt delivery by making Accurate Products your headquarters for your miscellaneous replacement parts needs.

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**UNITED EXPORT CORP. DE MEXICO S.A.**  
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Ribbons of velvet smoothness...  
ASPHALT-paved Interstate Highways

### THE ASPHALT INSTITUTE

Atlantic-Gulf Division  
1901 Pennsylvania Ave.  
Washington, D.C.



V. C. "Vic" Condron (right) of Seattle, first vice president of Automotive Booster Clubs International, congratulates Walker H. Walters of B-35, Richmond, Va., on being selected to receive the "Mr. International Booster" award for 1960 as the outstanding president among the 48 Booster clubs.

"There seems to be a general rise in price cutting these days that goes along with business slowing down. This seems to be more from some of the newer jobbers, but also from some of the old-timers. Collections are requiring more attention than they have in the past.

"The rains we had for a week really played havoc with us, but this is the only month [February] that we haven't had an increase. Business is there, but it will take top selling to get it."

A central Virginian with a slight sales increase observed:

"If I had any one problem to

Virgil E. Strobel, former vice president and general manager of Scheufler Supply Co., Great Bend, Kan., has been elected president. A native of Pratt, Kan., Strobel joined the company in 1933. Founded in 1910 by the late George Scheufler, Scheufler Supply operates 11 outlets in Western Kansas from its Great Bend headquarters. The firm was recently acquired by Gulf & Western Industries, Inc., one of the nation's largest wholesale distributors of automotive parts.



choose as my pet gripe, I think perhaps the seasonability of my section of the country would be it. January-March have always been slow volume-wise and collections poor. Until industry and more steady payrolls embrace us, volume will be short."

Bad weather got the credit for some declines of only a percentage point or two at some firms with many years in the wholesale business.

#### Alondra Picks Brogan, Hershey

Frank J. Brogan Co., with headquarters in Dallas, Texas, has been appointed factory sales representative for Alondra, Inc., Los Angeles, in Arkansas, Louisiana, Oklahoma and Texas, according to C. Elmer Johnson, Alondra vice president in charge of sales. The Maxim Hershey sales organization of Miami, Fla., covers the Southeastern states.

#### Detroit Names Hutchinson

John Hutchinson has been appointed eastern district sales representative for replacement sales for the Detroit Aluminum & Brass Corp., William E. O'Reilly, vice president—sales, announced. With headquarters in Philadelphia, Hutchinson will be responsible for sales of the Michigan Bearing line in Maryland, Delaware and Washington, D.C.

#### Belden Appoints Stuart

Warren Stuart has been appointed sales manager of Belden Mfg. Co., according to Les A. Thayer, vice president—sales. Stuart, who has been with Belden for 15 years, has always worked actively in the trade associations that his company serves, including National Automotive Parts Association.

# NEW time and tool savers...

## From HUOT



- Low priced Economy Models
- Heavy Super-Duty series
- Up-to-the-minute designs

MODEL 107 CHEST ONLY  
**\$28.50\***

*\*slightly higher in the East and far West*

Here are three new time-and-money-saving tool chests that will keep your valuable tools safe, clean and always on hand. Designed by Huot, the nation's foremost maker of deluxe chests and cabinets.

These chests can really take it, too. Super-Duty models are made from 18 gauge and heavier steel. Huot chests and cabinets are finished in baked-on red or two-tone blue and grey enamel.

#### HUOT ECONOMY CHEST

Model 107 retails for \$28.50\*—lowest priced full size automotive chest on the market. All new features. 26" x 12 1/4" x 12 1/4" blue or red.



### HUOT 100 DELUXE CHEST

The Huot Model 100 is custom designed for mechanics

who want the finest protection plus maximum accessibility for fine tools. It has eleven drawers—seven cork lined for fine tools, three heavy duty for large tools and one extra deep for power tools. A single latch locks the entire cabinet. 12 1/4" x 19" x 26 1/4" overall. Two-tone oil-resistant finish—red or blue.



### HUOT 250 ROLLING CABINET

**A BULLDOG FOR PUNISHMENT**—combines large drawers of a Porta-Cab and smaller drawers of a chest for complete range of storage. Rugged girder-design and members—single built-in lock—"Flying Saucer" casters. Seven drawers: three 1 1/2" x 6 1/2" x 16", two 1 1/2" x 21 1/2" x 16", and two 3 1/2" x 21 1/2" x 16". Overall, 18" x 26 1/4" x 33"—115 lbs. Gleaming red or blue finish.

MANY OTHER MODELS NOT ILLUSTRATED



Huot rhymes with "Do it"

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Two graduating classes of power brake and steering schools sponsored by Automotive Service, Inc., Wayne Bull Co., Mountjoy Co. and Southside Automotive, all of San Antonio, in collaboration with the University of Texas—Division of Extension, were held Feb. 6 and March 3, according to Mel Mountjoy. The instructor was Albert S. Seymour.

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Elimination of dual exhausts by car makers means more drivers want to buy Grand, the complete line that's so easy to sell, so easy to install.



### First Virginia Convention Scheduled for Roanoke

THE first annual convention of the Virginia Automotive Wholesalers Association will be held Oct. 29-31 at Hotel Roanoke in Roanoke. Executive Secretary Mason Phillips announced last month.

The association came into being at a one-day session last October with 100 charter members—a record for the South, if not for the nation.

Attendance is expected to range between 300 and 450. All representatives of aftermarket factories are invited to attend, according to John F. Midyette of Standard Parts Corp., Richmond, who is the president and was a keystone in the association's creation.

A golf tournament, perhaps two panels featuring factory men and jobbers, and several well-known speakers are tentatively being outlined for the convention.

### Maryland Wholesalers Plan State Association

PLANS for creating an association of wholesalers of Maryland are being shaped up.

Preliminary work toward this goal came out of the recent annual oyster roast staged by Automotive Booster Club B-17, at which a steering committee was named.

Aiding the committee were L. M. "Rip" Hicks of Auto Accessories Co., Alexandria, Va., and C. Mason Phillips, executive secretary of the Virginia Automotive Wholesalers Association, who told how the VAWA was created.



*Charlotte Southern Says:—*

" . . . . . SO IT TOOK  
10 STEPS TO **QUALITY.**  
WHY SETTLE FOR LESS?"



## Engine Rebuilders Attract Hundreds to Florida

**H**UNDREDS of jobbers and manufacturers are expected to attend the 39th annual convention of the Automotive Engine Rebuilders Association May 14-17 at the Hotel Fontainebleu in Miami Beach.

Theme will be "Beat Your Shop Drum in '61."

Following registrations on Sunday, May 14, a manufacturers conference period will take place. The same procedure will be followed on Monday, after which the first general session will be held. AERA President Richard S. Love of The Love Machine Co., Salt Lake City, Utah, will address the body, as will James H. Templin of Chicago, executive vice president.

Other speakers scheduled for that day include W. F. Boldt of Sunnen Products Co., St. Louis; Lewis H. Rumph of Ethyl Corp., Pittsburgh, and Jack Bryan of Perfect Circle Corp., Hagerstown, Ind.

A manufacturers cocktail party will be held from 6:30 to 7:30 p.m.

Speakers for Tuesday's general session will include William Hedges, AERA director of Portsmouth, O.; Philip R. Thomas of Carborundum Co., Niagara Falls, N. Y., and R. C. Adams, Jr., of Dun & Bradstreet, Inc. Other highlights of the day will include a panel discussion, "The Value of Examining the Entire Valve Train from Camshaft to Valve Lock," moderated by AERA director L. F. Guenther of Triangle Engine Rebuilders, Chicago.

Panelists will be Arnold Goetze

of Battle Creek, Mich.; A. K. Hanum of Thompson Products Replacement Division and Toledo Steel Products, Cleveland, O., and Charles W. Boesel of Hall-Toledo, Inc., Toledo, O.

A banquet and entertainment will take place that night.

An open forum on Wednesday morning, moderated by Past President J. Leonard Love of Salt Lake City, Utah, will deal with technical questions and answers.

F. C. Bradley, Jr., of New Haven, Conn., AERA past president, will preside over the third general session, which will take up "The Art of Cleaning"—a panel discussion. Participating will be John W. Hardison of John Rogers Co., Atlanta, Ga.; D. J. Barry of Magnus Chemical Co., Garwood, N. J., and S. L. Perkins of Oakite Products, Inc., New York, N. Y.

Other speakers on the final day's program will be G. E. Leutwiler of McQuay-Norris Mfg. Co., St. Louis, and D. W. Carlson, AERA director of Sioux City, Iowa.

Following the presentation of the Charles W. Yount Award, the election and introduction of the new officers and directors will conclude the meeting.

### Clayton Appoints Driscoll

Richard H. Driscoll of Charlotte, N. C., has been appointed district manager in the Carolinas for Clayton Mfg. Co., El Monte, Calif., manufacturers of steam cleaning equipment and automotive dynamometers. He is a graduate of Duke University.



Robert F. "Bob" Coleman, for many years with The Electric Autolite Co. in the Southeast and later sales manager of The Motor Supply Co., Savannah, Ga., died last month of a heart attack. In recent months he had been in charge of Motor Supply's branch at Brunswick, Ga.

### Texas Association Moves

New address of the Automotive Wholesalers of Texas is Driskill Hotel, P. O. Box 43, Austin 61.



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**The MASTER**  
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**FLOAT VALVE**

**Positively Stops Flooding... Smooths  
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4 OUT OF 5 CARS need this tiny precision part that makes such a B-I-G difference in performance! Easy to install... pays off handsomely in customer satisfaction and service profits (\$3.50 parts sale plus labor). For all popular cars and trucks—including '60 models.

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See your jobber or  
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DCT-17A

Want more facts? Use Reader Service Card Page 121

165

## Ten Southerners Win Top Gates Awards

**T**EN Southerners who were among the top winners in Gates Rubber Co.'s 1960 Gridiron Spectacular, picked on the basis of the amount of automotive belts and hose they sold to dealers, were:

Jody Ashby, Jr., of Ashby Auto Supply, Dallas, Texas; Francis B. Hammond of Skinner Auto Supply Co., Augusta, Ga.; Ashley L. Hobbs of Hobbs Auto Supply, Blackshear, Ga.; Blair Kline of Salvo Auto Parts, Middle River, Md.; Paul Lacrouts

of Rykoski, Inc., New Orleans, La.; J. D. Lyon of Motor Supply and Machine Shop, Inc., Bastrop, La.; A. G. Moore of Burke Auto Supply Co., Morganton, N.C.; Dale Swope of Warrensburg Auto Supply Co., Warrensburg, Mo.; C. E. Whiteis of Car Parts, Inc., St. Louis, Mo., and Ralph L. Wight of Monarch Auto Supply, Covington, Ky.

### Mrs. Edward Gammie Dies

Mrs. Edward Gammie, wife of the first vice president of Automotive Service Industry Association, died

recently after an extended illness. Gammie, vice president of Victor Mfg. & Gasket Co., Chicago, is a former president of the one-time National Standard Parts Association and was one of the joint committee of eight wholesalers and manufacturers which worked out details creating ASIA out of NSPA and MEWA.

E. E. "Jack" Roberts, for many years with Ramsey Corp., has purchased Dalton Auto Supply in Amarillo, Tex., and changed its name to Amarillo Automotive Supply.

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**AIR POWER Wheel Chuck**

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. . . works in seconds"**

**YOUR JOBBER HAS IT!**

**RADIATOR SPECIALTY CO.**  
CHARLOTTE, N. C.



## Niehoff Elevates Geyer and Boland

**F**RED H. Geyer, formerly sales manager for C. E. Niehoff & Co., Chicago, has been advanced to vice president in charge of public relations, while Richard W. Boland has been appointed general sales manager in charge of domestic sales of ignition parts, ignition testing equipment and brake parts.

Geyer, who joined the company in 1933, will be a good-will ambassador for the company. Boland had been assistant sales manager since 1956.

## Clevite Appoints Cooper

Richard F. Cooper, Jr., has been appointed sales manager of Clevite Service, Cleveland, O., and will be responsible for all domestic sales, as well as the supervision of all promotional and merchandising programs in the field. He will be assisted by C. J. Rannegger, manager of sales service; R. R. Thompson, special sales representative, and by the staff of five regional managers. Cooper joined the company in 1951 and in 1955 was appointed western regional manager.

## Blackhawk Hires Ruffolo

Thom Ruffolo has joined Blackhawk Automotive Division, Milwaukee, Wis., as territory manager covering Kansas and western Missouri, among other sections, according to Wes Kiley, general sales manager. Headquartering in Kansas City, Ruffolo will be responsible for all sales through jobbers of the division's complete line of lifting and collision damage equipment.

## Georgia Garagemen Set Dates

The annual meeting of the Independent Garage Owners of Georgia will be held at Ida Cason Callaway Gardens, LaGrange, on Sept. 15-17, President C. L. "Red" Salyer of Atlanta announced.

## Hogan Retires at GM

Henry M. Hogan has retired as vice president and general counsel after 41 years with General Motors Corp. Hogan joined the legal department in 1920 when the corporation was 12 years old.

## New Britain Appoints Miller

The New Britain Hand Tool Division of New Britain Machine Co. has appointed Dave Miller sales

manager in charge of NAPA sales and distribution. Employed by the company ten years ago, Miller originally covered the Southeastern territory in a sales capacity. Most recently he traveled the West Coast.

## Leeds of Raybestos Dies

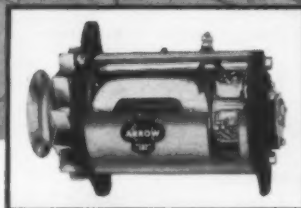
Norman Leeds, Jr., 59, assistant general manager of Raybestos Division, Raybestos-Manhattan, Inc., died last month in Bridgeport, Conn. He was successively process engi-

neer, service engineer, assistant sales manager, sales manager, factory manager and, since 1956, assistant general manager. He was elected a director of the parent company in 1955.

## Maremont Appoints Spear

Appointment of David A. Spear as vice president for manufacturing of the automotive replacement parts divisions of Maremont Automotive Products, Inc., has been announced by President Arnold H. Maremont.

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W. P. Piperburg — Birmingham  
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Lee Filter Company  
Wm. H. Wood — Cullman (B)  
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### ARKANSAS

Doyle Moore — Little Rock  
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### FLORIDA

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(AAR)  
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World Bestos Corp.  
Larry Grissom — Miami (B)  
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Maxim Hershey — Miami (AAR)  
Alondra, Inc.  
Doan Mfg. Co.  
H. M. Rogers — Orange Park (B)  
Climatic Air, Inc.  
Huot Mfg. Co.  
J. L. Meadows — Orlando (AAR) (B)  
Houser Eng. & Mfg. Co.  
P. A. Sturtevant Co.  
Max Yaras — Tampa (AAR) (B)  
Ace Rubber Co.  
National Brake Block Corp.

### GEORGIA

Aaron & Bell — Atlanta (AAR) (B)  
Eaton Mfg. Co. (Air Conditioning)  
Clark-Richards Co. — Atlanta (AAR) (B)  
Shurhit Products Co.  
Al F. Clayton — Atlanta (B)  
Grand Automotive Products  
Carl Clifton — Atlanta (B)  
Eaton Mfg. Co. (Pressure Caps)  
J. L. Daniell Co. — Atlanta (AAR) (B)  
Pullman Vacuum Cleaner Corp.  
Gene Fike — Atlanta (AAR) (B)  
Storm-Vulcan, Inc.

Ray Gandy — Atlanta (B)  
Jack-Pack Mfg. Co.  
C. E. McGruder — Atlanta (AAR) (B)  
Rubbermaid, Inc.  
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Otto-Items, Inc.  
Parker Bros.  
W. O. Setzer Co. — Atlanta (B)  
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Milton Shamitz — Atlanta  
Krylon, Inc.  
Art Styron — Atlanta (AAR) (B)  
F & B Manufacturing Co.  
N. A. Williams — Atlanta (AAR) (B)  
Gojer Co.  
Edward Zinnell — Atlanta (B)  
Lee Filter Corp.  
F. H. Williams Co. — Covington (AAR)  
(B)  
Acme Air Appliance Co., Inc.  
Monkey Grip Sales Co.  
Roy Lippincott — Decatur  
Champion Pneumatic Machinery Co.  
W. M. Carlton — St. Simons Island (B)  
DL Products, Inc.

### KANSAS

Arthur Colgrove — Hutchinson  
Parker Bros., Inc.  
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Phil S. Crutcher — Louisville (B)  
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Paul K. Wilcox Co. — Kansas City (AAR)  
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Don Ayd — St. Louis (AAR) (B)  
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A. W. Mansfield — Greensboro  
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Felt Products Co.

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Southern Friction Materials Co.

J. S. Connell Co. — Dallas (B)  
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Pullman Vacuum Cleaner Corp.

Sam Gillier Sales Co. — Dallas  
Ace Rubber Products, Inc.

John D. Harvey Co. — Dallas (AAR) (B)  
Muskegon Piston Ring Co.

Hirsig-Frazier Co. — Dallas (AAR) (B)  
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W. F. Janowski — Dallas  
Storm-Vulcan, Inc.

Ralph Jeffress — Dallas (B)  
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Lynn & Hemphill — Dallas (AAR) (B)  
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Kool Kooshlon Mfg. Co.

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Ralph Russell — Dallas (AAR) (B)  
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W. Frank Russell Co. — Dallas (AAR) (B)  
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L. R. Oatey Co.  
Rubbermaid, Inc.

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Vogel-Swygard Assoc. — Dallas (B)  
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Lee Filter Corp.

Wilkinson-Rey Assoc. — Dallas (B)  
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O. C. Zell — Dallas (B)  
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James E. Duffee — Richmond (AAR)  
Arrow Safety Device Co.

## WEST VIRGINIA

George M. Scott — Charleston  
Bishman Mfg. Co.

Mohr & Son—Kenova  
Ace Rubber Co.



## Tool Tips for the Mechanic

### Removing Dynaflo Oil Seal

Want to save about two hours' work time? Use the SNAP-ON® S-8094A cotter pin tool for pulling the front pump oil seal on all models of Buick Dynaflo transmissions. Tool lets you do the job without removing bell housing. See page 65, Catalog X.

### Setting Mercury Caster and Camber

Use the SNAP-ON XL-169 tappet wrench to set caster-camber on 1959-1960 Mercurys that use set screws instead of shims. Works like a charm. It's also handy for loosening gas lines on Chrysler products because the line enters the fuel pump near the radiator and you need plenty of leverage. Page 55, Catalog X.

## NEW TOOL



### Snap-on S-8366

#### Caster-Camber Torque Adaptor

This new S-8366 caster-camber torque adaptor does two jobs on 1955-1961 Nashes and Ramblers. It loosens the attaching bolt nut, then turns the bolt and eccentrics to provide caster-camber adjustment.

The 1960 American Motors Manual states that it is impractical to torque the attaching bolt nut due to its hard-to-get-at position. The S-8366 wrench with its 45-degree offset makes the job both practical and easy. Use this adaptor with the SNAP-ON TQ-150 Torqometer. This new tool is not in the catalog. Ask your SNAP-ON man to show it to you.

### Removing Chrysler Line Timing Gear Covers

The SNAP-ON S-8173 distributor wrench is just the tool for removing the timing gear cover on all Chrysler line cars. Same tool also saves time removing Chevy fuel pumps. See page 83, Catalog X.

### Adjusting Caster-Camber on GM Cars

Use the SNAP-ON WA-303 set for servicing 1957-60 Buicks, Olds, Chevys; 1958-60 Pontiacs; all 1959-60 Chrysler products. Set consists of S-9834 torque adaptor, S-9834-22 and S-9834-23 sockets. Use with TQ-150 TORQOMETER®. Page 76, Catalog X.

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8030-D 28th Avenue • Kenosha, Wisconsin

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# HASTINGS

## Flex-Vent Oil Ring

*with stainless steel expanding spacer*

**Easiest to install . . . can't go in wrong**  
**Greatest oil drainage . . . can't clog**

Now you can get a conformatric oil ring that's easy to install—and won't plug up.

It's Hastings Flex-Vent—the world's easiest ring to install. Spacer and rails spiral-on in no time flat . . . and you can't install them incorrectly, even if you tried.

Hastings Flex-Vent has the greatest drainage of all oil rings. You can *see* the ample ventilation that assures efficient drain-back—prevents clogging—gives long-lasting oil control.

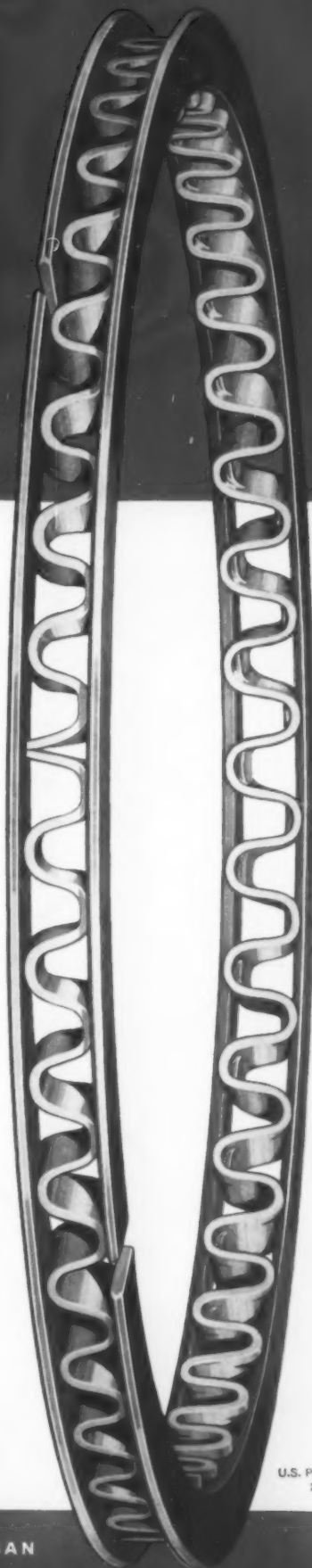
The stainless steel spacer resists corrosion and prevents build-up of sludge and carbon deposits. Built-in tension makes this ring conform to cylinder walls in straight, tapered or out-of-round bores. Side sealing is built-in, too—for positive oil control.

Hastings Flex-Vent assures the same remarkable oil control you've always enjoyed in Hastings Steel-Vent . . . assures the same freedom from come-backs . . . better profits . . . satisfied customers from the start.

### TOUGH BUT OH SO GENTLE

**TOUGH**  
on oil pumping

**GENTLE**  
on cylinder walls



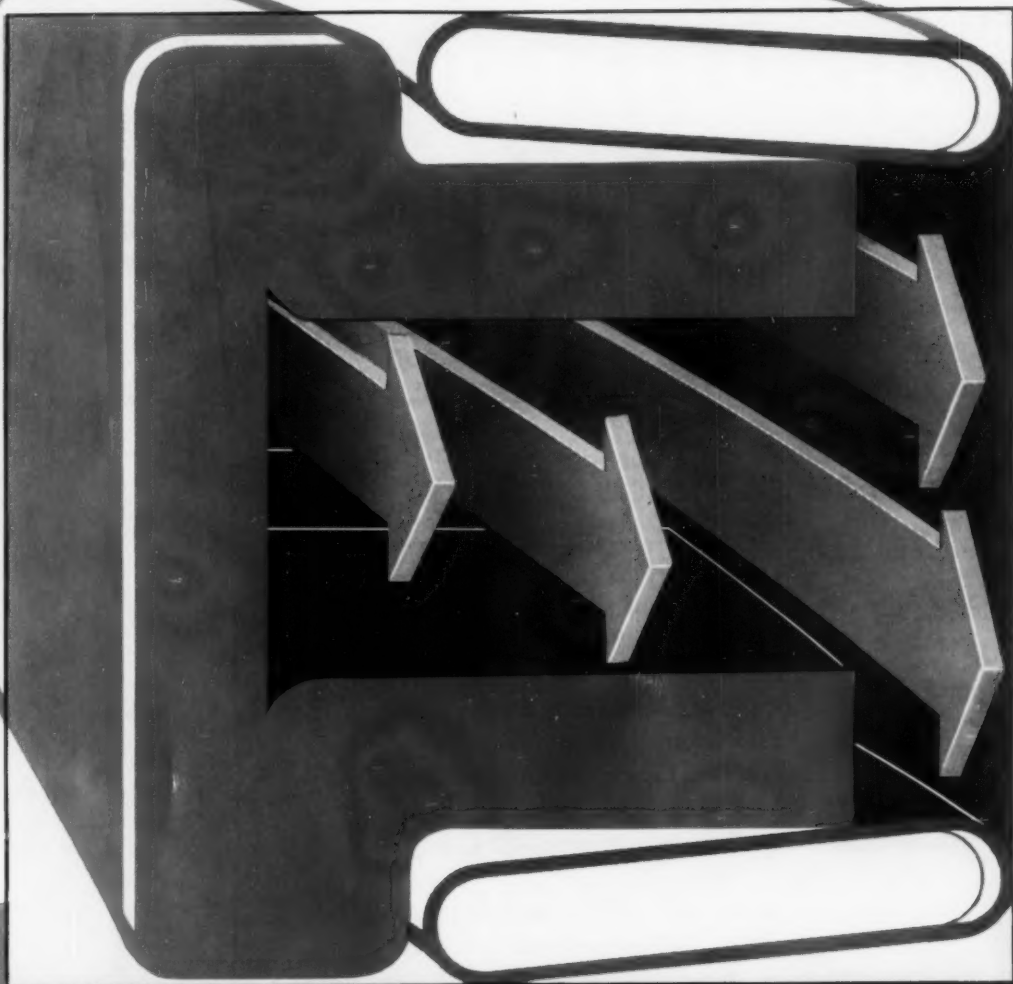
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Piston Rings, Oil Filters, Casite Additives, Spark Plugs

## RAMCO C-9 BACKBONE

gives you much more flushing space to stop oil clogging



You can easily see: there is much more oil flushing space in the C-9 oil ring than average modern oil rings.

This makes sure oil circulates freely, won't clog or cook in drainage vents. C-9's vents aren't even near the cylinder

heat, either—they are 40% farther away, where it's cool.

The backbone makes this difference. Next time you install a C-9 oil ring, study it; feel it. Note the extra big flushing chamber. And when it's installed, note the effectiveness. It works.

## *the* backbone *makes the* difference



Good oil flushing action is only one of many differences the Ramco backbone brings you. They are all described in our folder, "BACKBONE FACTS." See your Ramco Jobber or write for your free copy; RAMSEY CORPORATION ST. LOUIS 8, MISSOURI, a subsidiary of Thompson Ramo Wooldridge Inc.



**RAMCO MODERN POWER  
PISTON RINGS**

